



CITY OF DUNDEE



REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

YEAR ENDING 31ST DECEMBER, 1926



DUNDEE :

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Public Health Department
Dundee, August, 1927.

The Lord Provost, Magistrates, and Town Councillors
of the City of Dundee.

Gentlemen,—

I have the honour to submit my Annual Report on the health of the City of Dundee during the year 1926.

The general arrangement is the same as that adopted in my last report, the statistical matter being kept separate from the text. The reports of the executive medical officers and that of the Chief Sanitary Inspector are included.

I have once more to express thanks for the loyal support given me throughout the year by the members of the staff of the Department.

I am, Gentlemen,

Your obedient Servant,

W. R. Burgess.

Medical Officer of Health.

STAFF OF THE HEALTH DEPARTMENT.

Medical Officer of Health.....	W. L. BERGESS, M.D., D.P.H., D.T.M. & H.
Chief Sanitary Inspector.....	ROBERT MITCHELL
Veterinary Inspector.....	HUGH FERRIER, M.R.C.V.S.
Chief Tuberculosis Medical Officer.....	J. H. HUNTER, M.B., D.P.H.
Assistant Tuberculosis Medical Officer.....	ARTHUR MEEK, M.B., D.P.H.
Child Welfare Medical Officer.....	MARGARET SCOTT DICKSON, M.B., D.P.H.
Medical Officer, Ante-Natal Clinic (part time)...	MARGARET FAIRLIE, M.B., Ch.B.
Dental Surgeon—Special Child Welfare Dental Clinic (part time)—	
	H. GORDON CAMPBELL, L.R.C.P., L.D.S.
Medical Officer, Venereal Diseases Scheme—	
	CHARLES AVERILL, M.A., B.Sc., M.D., D.P.H.
Medical Officer, Women's Section, Venereal Diseases Scheme—	
	ANNIE FULTON, M.B., D.P.H.
City Analyst (part time).....	ANDREW DARGIE, B.Sc., A.I.C.
Matron, King's Cross Hospital.....	Miss M. A. CLARK
Senior Resident Medical Officer, King's Cross Hospital—	
	JOHN PETRIE, M.B., D.P.H.
Junior Resident Medical Officer, King's Cross Hospital—	
	R. S. MACARTHUR, M.B., Ch.B.
Diseases of the Ear, Nose and Throat—Consulting Surgeon—	
	R. P. MATHERS, M.D.
Matron, Ashludie Sanatorium.....	Miss A. HENRY
Clerical Staff.....	7 CLERKS
Sanitary Staff.....	1 SUPERINTENDENT and 17 INSPECTORS
Health Visitors—	
Child Welfare.....	Miss HUNTER, Superintendent, and 10 Others
Tuberculosis	4 NURSES
Venereal Diseases.....	3 MALE NURSES and 1 FEMALE NURSE
Day Nursery Staff.....	4 MATRONS, 8 NURSES, etc.
Epidemic Officers, Disinfecting Officers, Ambulance Drivers, Hospital Staff, etc.	

ANCHLLARY INSTITUTIONS.

Bacteriological Laboratory, University College.

Director—Professor W. J. TULLOCH.

Assistant—JAMES CRAIGIE, M.B., Ch.B.

Infant Hospital, The Lodge, Broughty Ferry.

Matron—Miss EDWARDS.

Resident Medical Officer—ISABELLA SIM, M.B., Ch.B.

Seafield Hostel, Lochee Day Nursery, etc., etc.

Summary of Vital Statistics.

The following is a summary of the principal statistics for the years 1924, 1925, and 1926 :—

	1924.	1925.	1926.
Population	171,295	169,361	170,060
Number of Deaths (corrected)	2,809	2,825	2,514
Death-rate per 1,000 population (corrected) ...	16.4	16.7	14.8
Deaths of Infants under 1 year	464	467	382
Infantile Death-rate per 1,000 Births	120	126	103
Marriage-rate per 1,000 Population	7.6	7.6	7.7
Number of Births registered (corrected)	3,865	3,694	3,724
Birth-rate per 1,000 Population	22.6	21.8	21.9
Illegitimate Birth-rate per 100 Births	7.2	6.4	6.9
Number of Deaths from Pulmonary Tuberculosis ...	146	148	138
Death-rate per 1,000 from Pulmonary Tuberculosis	.85	.87	.81
Death-rate from all forms of Tuberculosis	1.23	1.22	1.12
Death-rate from the Principal Epidemic Diseases...	1.69	1.70	.79
Deaths from Enteric Fever	1	0	1



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Annual Report—1926.

In the following pages some attempt is made to describe the state of health of the population of the City of Dundee during the year 1926. Details are also given of the work done throughout the year by the various sections of the Public Health Department in order to protect and improve the health of the city.

Industrial troubles made the year 1926 rather a difficult one, and it is satisfactory to note that, if any injury to health resulted, the effect does not appear to have been immediate and is not reflected in the annual health statistics. The evidence provided by these figures suggests that the year was a comparatively healthy one. The general death-rate and the infantile death-rate were the second lowest, while the tuberculosis death-rates were the lowest ever recorded for Dundee. It must be admitted that somewhat accidental causes arising from the comparative absence of the acute infectious diseases so fatal to children, and the low incidence of the respiratory infections, were to some extent responsible for the low general and infantile death-rates. The decline in the tuberculosis death-rate, however, cannot be described as in any way accidental. It represents another step in the gradual eradication of that disease.

Very complete statistics are included in the statistical section of the report, and comments are made in the text when it is considered that these are called for.

The year under review is outstanding because very definite progress was made in providing the means for safeguarding the future health of the City of Dundee. First place must be given to the progress made in the production of new houses. In this respect the year was a record one. Very little headway was made in the way of slum clearance, and I grumble accordingly. At the same time, it must be admitted that a necessary preliminary to slum clearance is the provision of new dwellings.

Certain of the institutions of the department received particular attention, and very definite progress was made with the Public Health Institute and with the principal Child Welfare Centre. It was also decided by the Council to proceed with considerable extensions to Ashludie Sanatorium. The department has had to carry on many of its activities under conditions which made efficiency very difficult, and which were certainly not in keeping with the dignity of the city. Marked progress was, however, made last year, and before the end of the present year many of the defects will have been made good.

A beginning was made with the application of modern methods of controlling diphtheria by means of the Schick test and toxin-antitoxin mixture. A fair amount of work was done, but little more is possible with the present staff. An extra medical officer will be necessary if the work is to continue. The expenditure involved must not be considered as additional, for it will undoubtedly be more than set off by a saving in the cost of hospital treatment.

The activities under the Tuberculosis, Venereal Diseases, and Child Welfare Schemes were continued during the year, and the reports of the responsible medical officers are included in this volume.

The Registrar-General has found it necessary to make Population.
 an alteration in the method of estimating the populations of the sixteen larger burghs of Scotland. The estimates of these populations were formerly based solely on housing figures, and were not adjusted for the general gain or loss of the population of Scotland by immigration and emigration, which adjustment was restricted to the estimates for the smaller burghs and the county districts. The Registrar-General has intimated that he now thinks it fairer to make the adjustment universal and to include the larger burghs in the calculation. He states that one matter which helps to justify the change is the present somewhat unsatisfactory nature of the housing figures, these indicating the building of new houses to meet pre-existing requirements rather than any influx or increase of population. The estimates of the population of Dundee for the years 1925 and 1926 used in preparing the vital statistics for annual report purposes were adjusted as described. Those for the years 1922-24 were based on housing figures only. The revised estimates for the years 1922-1926 are as follows:—1922—171,921; 1923—169,644; 1924—168,477; 1925—169,361; 1926—170,060, and the figures used in the annual reports of 1922, 1923, and 1924 were 172,061, 170,901, and 171,295 respectively. The estimate for 1926 is greater than that for 1925 by 699, and shows an increase of 1,745 over the 1921 census figure. The patient population of the Dundee and District Asylum is not added to the estimate, although the deaths of patients in that institution help to swell the Dundee mortality statistics.

The vital statistics (*v. Summary, page 7*) for 1926 show Vital Statistics.
 a marked improvement over recent years. The general death-rate of 14.8 per 1,000 living compares very favourably with 16.7 in 1925 and 16.4 in 1924. The comparatively low figure last year is due mainly to a reduced number of deaths from the respiratory and from the infectious diseases. The lowest rate recorded for Dundee is 14.7 (1917—1919—1923). The figure for the whole of Scotland last year was 13.0.

The infant death-rate was 103 per 1,000 births compared Infantile Mortality.
 with 126 in 1925 and 120 in 1924, the marked fall being due to the much smaller number of deaths among infants from respiratory causes and from the ordinary infectious diseases. The record infantile mortality figure for Dundee is 98, which occurred in the year 1923.

Deaths from
Tuberculosis.

Another record has been reached for tuberculosis. The total number of deaths from all forms of tuberculosis last year was 190, less than half the number which occurred in the year 1915 (388). The rate per 1,000 living works out at 1.12, a record figure, the previous lowest being that for 1926, when there were 207 deaths with a rate of 1.22 per 1,000 population. The deaths from the most fatal, that is, the pulmonary form of the disease, are also less numerous, giving a rate of .81 per 1,000 population, a new record, the previous best being .85 in 1924. Tables XXIV. and XXVIII. and Chart 3 illustrate well the steady decline in the tuberculosis death-rates in Dundee.

Deaths certified as due to respiratory causes were very much fewer, and there was even a fall, a small one, but none the less welcome, in the number of deaths from malignant diseases (Tables XV., XVI., and XVII.). The epidemic diseases also did less damage than they have done recently. The certified causes of death in 1926 are classified in age periods in Table III.

Monthly
Death-rate.

The death-rate was lowest in July and highest in April. The high figure for April (18.9) was the result of a sharp outbreak of influenza and pneumonia about that time. All the winter months showed rates higher than that for the whole year.

Table IV. shows the death-rates at the different age periods last year, and also for each of the years 1922-25. No special comment is necessary. All age periods, except possibly the later ages, shared in the general fall. The rate at ages under one year has already been commented on.

Death-rates
in various
City Wards.

The statistics for each of the city wards are given in Tables V., VI., VII., VIII., and IX., and in Chart 5. Ward 3 showed the highest death-rate from all causes last year, Wards 1, 2, 3, and 8 all having figures higher than, and Ward 6 a rate equal to, that for the whole city. As usual, the lowest figure is that for Wards 10 and 11. In Wards 1, 3, and 8 all last year's death-rates, general, infantile, epidemic disease, and tuberculosis, were higher than those for the city as a whole. In Wards 10 and 11 all the rates were lower than those for the whole city. The infantile

mortality, for example, was 66 in Wards 10 and 11, 103 for the whole city, and 132 in Ward 8. Every ward which, year after year, shows high rates has within it conditions of housing which are mainly responsible for the unsatisfactory figures. Congested areas, containing small overcrowded dwellings, miserably equipped, make it impossible for the residents therein to maintain health. Until these conditions are swept away, we cannot hope to reduce to any satisfactory degree the excessive number of deaths which has to be recorded each year, nor prevent the excessive sickness, the extent of which cannot be measured until it ends in death. The central districts of the city have the worst housing conditions and the highest rates. Taking the average for a period of years, the general death-rate is highest in Ward 6, but Wards 2 and 8 are not far behind. The average rate of infant deaths is highest in Ward 3, with Wards 6, 8, and 2 following in the order given.

The housing position in Dundee is not considered to be Housing. satisfactory because (a) it is believed that there is not a sufficient number of dwellings to house the population of the city in a satisfactory manner and because (b) many of the houses which are now in use are in an insanitary state or even unfit for human habitation. The public health is therefore exposed to risk owing to the overcrowding of houses, possibly two or more families using a house sufficient for one only, and because many people are living in an environment calculated to lessen their natural resistance to disease and liable to encourage the spread of communicable disease. These two factors (a) and (b) together really constitute what has become known as the housing problem. They have also served as guiding principles in the efforts which are being made to solve that problem. In a rough way it may be stated that the present housing activities consist of—

i. The provision of new houses to relieve the existing shortage and to provide for increase in population.

ii. The improvement or demolition of slum houses and areas. This includes not only the repair of houses, the closure and demolition of unfit houses, and the making of improvement or reconstruction schemes, but may also include the erection of new houses to serve exclusively as alternative accommodation for dislodged slum dwellers.

The erection of new dwellings is included in both these lines of activity, forming, indeed, the whole of the first. It is included in the second mainly because the house erected exclusively for the slum dweller deprived of his house receives special treatment in the way of state assistance, and such a house is usually let at a rent lower than that charged for a house erected to relieve shortage.

Considering the year 1926 in the light of these two lines of activity, it must be considered as a very successful one. This is especially so in regard to the erection of new houses under i. A study of the Chief Sanitary Inspector's report on the subject is of interest. It appears that 744 new houses were completed in Dundee last year. At the end of the year many more were in course of production. The figure 744 is the highest yet reached, and it represents a magnificent contribution towards the solution of the housing problem. Of the total, it is recorded that 389 were erected by the Corporation and 355 by private enterprise. The latter figure includes, I understand, some 208 houses erected under a Government Scheme through the agency of the Second Scottish National Housing Company (Housing Trust), Ltd. Last year's production of houses was much greater than the normal annual increment required for increase of population and to replace wastage. Unfortunately, it is impossible to estimate with anything like accuracy the annual increase in the population of a community, and therefore it is impossible to say how many new houses are required to house any such increase. Indeed the annual estimate of the population is to a large extent based on the number of occupied houses in that community. It would have been much more to the point had the reverse been possible. An additional census with a simplified schedule in the middle of 1926 would have been of inestimable value. According to the Registrar-General the population of Dundee has increased by 1,745 since the 1921 census, that is, a period of five years. From 1924 to 1926 he estimates that it increased from 168,477 to 170,060, or by 1,583, and that the annual increase during the-year 1925-26 was 699. These figures are not very helpful in the consideration of a house-building policy. They are the best we can get, but they are not trustworthy. To measure the value of population estimates one has only to examine the position in the year 1920-1921. It was estimated that the population of Dundee at the middle of 1920 was

New Houses
completed
in 1926.

184,081. The census taken in the middle of 1921 showed, however, that it was only 168,315, that is, a difference of 15,766 between the estimate and the actual. The annual changes in population are therefore unknown quantities, and the position will remain indefinite until the census is due to be taken again in 1931. One must presume that the population is increasing. There can be no doubt, however, that the number of new houses completed in Dundee last year exceeds greatly the normal annual increment of new houses. I understand that during the present year the high rate of output is being not only maintained but markedly increased, and the Housing Director informs me that the number of houses to be completed during 1927 will be incomparably greater than ever before.

Very definite progress is therefore being made in the direction of the provision of new houses to relieve shortage and to provide for any increase in population.

The second line of activity, namely slum clearance, as outlined under ii. on page 13, requires some consideration. To begin with, the number of houses erected exclusively for slum clearance purposes (30 at 31st December, 1926) is a very tiny fraction of the total number completed. No doubt new houses erected for any purpose whatever will have a certain indirect influence on the slums and will make their abolition a little more possible. The position in Dundee however calls for a more direct attack, and houses will have to be allocated definitely for the ejected slum dwellers. The problem is a difficult one, no doubt, but it must be faced. The finding of suitable sites will not be easy. The rents will have to be very reasonable, and may necessitate the building of houses of a smaller type. While not in favour of the erection of houses of less than three rooms if it can possibly be avoided, it must be admitted that the two-roomed house being built to-day is vastly different from the old two-roomed house. The new type has in addition to the two rooms a kitchenette and a bathroom. A two-roomed house can be quite a healthy house if it is controlled in regard to number and sex of occupants. The control can be obtained by means of the bye-laws which must be framed by local authorities under Section 59 of the Housing (Scotland) Act, 1925. Such bye-laws have not yet been made for Dundee, but they are now in course of preparation. It

Slum
Clearance.

The
Two-roomed
House.

is not suggested that all the houses erected for slum clearance purposes should consist of two rooms, but a proportion of them must be, unless some other method can be devised to provide houses which can be let at rents payable by the worker in the staple industry of the city.

Tenements.

New houses for slum clearance purposes will usually, if not always, have to be of the tenement type. Naturally one would prefer the flatted house, but it must be admitted that that is an ideal which cannot be realised, especially in an industrial city like Dundee. In erecting tenements particularly in or near the centre of the city, attention should be given to the recommendations of the Royal Commission on Housing in Scotland, not only in regard to the number per acre, arrangement in detached blocks, etc., but also "That there should be sufficient open space about tenements to provide adequately for ventilation, and sufficient space in the immediate neighbourhood to allow (1) Children's playgrounds, (2) Public bowling-greens and gardens, (3) a certain number of private gardens to the houses, (4) so far as possible a separate bleaching and drying green to each house." The first of these must be considered as absolutely essential no matter where the tenements are built; the other three recommendations should be followed when at all possible. This matter will require careful consideration if the Town Council decide to proceed with an improvement scheme for the Small's Wynd district regarding which an official representation was submitted on 16th October, 1926.

It is considered by some that there is a certain risk in allowing slum dwellers to occupy new houses. The risk does not appear to be very great. The new slum clearance houses in Fullarton Street are occupied by the ejected tenants of the Blue Mountains and other slum houses. Nevertheless the new houses are kept wonderfully well. There is naturally evidence of poverty and in some cases lack of cleanliness, but considering all the circumstances there is little to complain of. The tenants have yet to become accustomed to their new environment, and a little guidance now and then from the right type of person would, I am sure, be welcomed by many of the housewives. The employment of women rent collectors with experience in house management is worthy of consideration in the interest of the community as well as in the interest of the tenants of Corporation houses.

Women
rent
collectors.

Details of the actual slum clearance work done in 1926 are given in the Chief Sanitary Inspector's report. By the end of the year a certain number of the Blue Mountains Improvement Scheme buildings had been demolished. The work of demolition is very slow in this area. It was hoped that the site would have been cleared long ere now. In October I submitted an official representation in regard to several areas in the Small's Wynd district. Some 270 houses are involved, and over 50 other premises. Besides work under these schemes some 96 houses in various parts of the town were made the subjects of closing orders, and the owners of other 96 houses were given the opportunity under the repair, etc., section of the Housing (Scotland) Act, to put their houses into a state fit for human habitation.

The Chief Inspector points out that of 268 houses made the subject of closing orders since the end of the war, 95 are still in occupation and only 66 have been demolished. It is by no means always possible to demolish a house which has been closed by order, and very often the empty dwelling becomes a nuisance. Naturally the owner is willing to derive some revenue from such closed houses, and may ask the consent of the local authority to let the premises as a workshop or store or for some purpose other than as a dwelling. Consent should only be given after very careful consideration. The demolition of the building at a later date may become more difficult if a house in it, emptied because it is unfit for human habitation, is permitted to become business premises. Business premises are not so easily dealt with. In any case the local authority should give their consent only after considering all the circumstances. The owner should usually be asked to submit plans and a written description of the work he intends to do to make the house suitable for its new purpose. In most cases a provisional consent only should be given, withdrawable at any time should circumstances arise to make that advisable.

Briefly, the work actually done in Dundee last year in connection with housing consists of the erection of a large number of new houses and the demolition of a very small number of slum houses. I sincerely hope that slum clearance will now get an innings.

Number of
houses still
required.

The Scottish Board of Health have asked medical officers of health to give in their annual reports information as to the number of houses estimated at 31st December, 1926, as then required adequately to meet the needs of their districts (including houses required to replace houses at present occupied that should be closed and demolished). The information is not easy to give, and failing a detailed survey of the whole city any estimate of Dundee's requirements can only be a very rough one. In December, 1924, I submitted a report on the subject and then ventured to suggest that "the Housing Committee should act in the meantime on the assumption that 8,000 new houses must be provided in Dundee during the next 15 years." I also gave it as my opinion that "any figure submitted may have to be modified from time to time according to circumstances." It may be worth while reviewing the position as at December, 1926, when two of the 15 years had elapsed. During these two years 1,033 new houses were completed. Of that number, 591 were erected by the Corporation and 442 by private enterprise, etc. The rate of house building has therefore been maintained pretty much as suggested in my report. In certain of the methods which were used in striving to form a working estimate it was assumed that the number of houses required to house surplus population was 1,340. It was also assumed in one of the methods that the natural increase of the population would be on the average 1,500 per annum. In actual fact during the two years ending December, 1926, the average annual natural increase of population was only 1,039. Assuming that the population increased annually by increments represented by that figure, and allowing five persons per house, 416 houses would have been required to provide for population increase during the two years. The actual increase may be assumed to be very much less than the natural increase owing to the effect of migration, and the Registrar-General estimates the actual increase during the two years to have been 1,583. Using that figure and allowing five persons per house, 317 houses would have been required to provide for two years' increase of population. In the 1924 estimate, it was assumed that 2,000 houses were required to replace those which should be demolished as uninhabitable. The houses still required at 31st December, 1926, would, according to these figures, be as follows :—

Houses required to house surplus population	
as at December, 1924	1,340
Houses required to house two years' population increase	317
Houses required to replace unfit houses ...	2,000
	3,657
Less 1,033 completed during the two years ...	1,033
Number required at 31st December, 1926 ...	2,624

The figure 2,624 may therefore be considered as a rough estimate of the number of houses required at 31st December, 1926, adequately to meet the needs of Dundee at that date. From information given me by the Director of Housing, and from actual figures kindly submitted to me by Mr. Darge, showing the position at 4th August, 1927, it would appear that the situation will be considerably relieved by the end of the present year. The estimated shortage should be wiped out and any increase of population more than provided for. It should then be possible to concentrate on slum clearance in such a manner that for each new house erected there will be demolished at least one slum dwelling.

The work done last year to maintain and improve the sanitary state of the city is described in detail in the report of the Chief Sanitary Inspector. Little more need be said here on the subject. General Sanitation.

In pursuance of instructions from the Scottish Board of Health, a survey was commenced and completed for Ward 6 in regard to certain specified sanitary matters. The results are recorded by Mr. Mitchell. He reports that in 4,109 houses or 93 per cent. of the total in the ward, water had been introduced, leaving 290 or 7 per cent. with source of water supply outside the house in stairs, passages or courts. As resolved by the Public Health Committee, a supply of water must be available inside every house irrespective of size. A house which is not so provided should nowadays be considered as unfit for human habitation and dealt with accordingly unless the owner agrees to carry out the necessary work immediately. It is not a question of an ideal, but of an essential requirement for every habitable house. The percentage quoted above may be considered as fairly

good, and indeed is so if compared with standards of, say, fifty years ago. It is not good enough for the industrial city of to-day, and Mr. Mitchell's efforts to make the figure 100 per cent. will receive the support of all who appreciate the importance of cleanliness.

Less satisfactory are the results of the survey of Ward 6 relating to water closets and ashpits. Not even one quarter of the houses in the ward are served by a separate water closet, and in 21 per cent. of the households there is only one water closet to every five houses. Mr. Mitchell and his staff have work in plenty here. The Public Health Committee have indicated their support by resolving that, where possible, there must be one water closet for each house. Unfortunately it is not by any means always possible to apply the standard, and very often we will have to be content with something less. In every such case there must be some good reason forthcoming to permit the relaxation of the standard. That there are no dry closets and no privy middens in Ward 6 is a matter for satisfaction, and is a tribute to the work of the sanitary inspectors.

Ashpits are still very much in evidence in the city. Indeed in Ward 6 some 2,407 houses or 55 per cent. are so served. Mr. Mitchell records that in one instance, a single ashpit has to serve 84 households and in another, one serves 78 households. These cases are fortunately isolated, but they and others emphasise the need for a thorough overhaul of the methods in use in Dundee for the temporary storage of house refuse.

The provision of separate water supply and of wet and dry refuse removal services for each house naturally presents many difficulties, and the sanitary inspectors' task is no light one. To introduce these facilities into each of a large number of single-roomed houses is a big job and a costly one. Realising that pressure in this direction will tend to perpetuate the one-roomed house, Mr. Mitchell has been trying with some success to persuade owners to unite two single-roomed houses to form one two-roomed house. In this way, the proprietor is saved a certain amount of capital expenditure on water supply or water closet provision, although he will lose a little in annual revenue. As a result, however, two one-roomed houses disappear and are replaced

by one reasonably equipped two-apartment dwelling. The number of one-roomed houses in Dundee is excessive, and it is hoped that by closure and demolition and by absorption as described, the number will be considerably reduced before the next census is taken. The one-apartment dwelling is usually produced by the subdivision of larger houses. Such subdivision will, I hope, be prohibited under the housing bye-laws now being framed. A certain number of single-apartment dwellings in Dundee are occupied by one individual, very often a woman rather advanced in years, possibly still working, but more likely depending on the old age pension for maintenance. The single room is all that such a person can afford, all that she is able to look after, and possibly all that she needs. I would be very unwilling to interfere with these people, but it may be that special consideration will be given at a later date to this type of worker or pensioner and something of the nature of a modified hostel provided with single rooms and communal services. I know this matter has been already raised, and I believe rejected, but the housing of such people is part of the housing problem, and their needs cannot be neglected. Meanwhile the tiny houses they occupy cannot be said to be overcrowded, and they should be left alone unless the needs of the neighbourhood demand the demolition of the building.

In June of last year complaints were received from the west end of the city of a plague of mosquitoes. The source of the nuisance was found to be the stagnant pool known as M'Millan's pond situated at the west end of the Magdalen Green. The water was found to be absolutely loaded with mosquito larvæ. They were present in enormous numbers in a tiny sample of water taken for laboratory examination. On investigation, the larvæ proved to be those of *Culex pipiens* or the ordinary gnat. Not being known disease carriers, the swarms of insects, which were repeatedly hatched, were not likely to be a serious danger. Nevertheless, they constituted an undoubted nuisance and were very unwelcome visitors to houses in the neighbourhood. The nuisance is not likely to be a recurring one, however, as the pond has been filled up.

Details of the inspections made and of the food samples examined are contained in the report of the Chief Inspector.

Mosquito
Nuisance.

Food
Supply.

The milk supply and meat supply to the city received a great deal of attention, and the administrative machinery for the regular inspection of these important commodities may now be said to be complete. In the case of the meat supply, the effect of the new machinery was immediate, but in the case of the milk supply some considerable time must elapse before anything like the full effects can be expected.

Meat
Inspection.

As described in last year's report, the personnel of the inspecting staff is complete, and during the whole of 1926 the uniform system of inspection was in operation in Dundee. The actual work of meat inspection is carried out by Mr. Anderson, the Superintendent of the Slaughterhouses, and Mr. Ferrier, the Veterinary Inspector, with the assistance of the detention officers. Tables XLIII. to XLVII., submitted by Mr. Anderson, contain details of the work done, and Mr. Ferrier submits some comments in his report on page 166. Among animals slaughtered at the Slaughterhouse the number of detections of disease during the process of slaughter was 3,528 in 1926 as compared with 1,714 in 1925, an increase of 1,814 for the year or more than 100 per cent. These figures are surely very striking, and failing any other explanation one must assume that they illustrate the need for the more thorough system which is now in operation. A slight decrease from 343 in 1925 to 305 in 1926 is shown in the number of detection of disease in consigned carcasses. The following is an excerpt from a note sent to me by Mr. Anderson, the Superintendent of the Slaughterhouses and Meat Inspector:—

“ During the past year the provisions of the Meat Regulations with respect to detection, detention and seizure have been carried out efficiently and effectively with the minimum of trouble from the owners of suspected animals, but there is one point I wish to draw your attention to with regard to carcasses consigned to the Meat Market from centres outwith the City, including These carcasses as a rule are the carcasses of animals evidently slaughtered in emergency, and while many of them bear evidence of slight or casual examination, and in a good many instances are accompanied by certificates from the district Meat Inspector declaring them to be fit for human consumption, there is absolutely no attempt to execute

the provisions of the Meat Regulations with respect to final examination, or removal from the carcasses of diseased parts, or parts rendered unfit for human food by reason of injuries or conditions necessitating local seizure, with the result that a great amount of my time is taken up daily in the performance of final examinations of carcasses, which should, in accordance with the regulations, be carried out at the place of slaughter and detention, before they are released by the inspectors for consignment or sale."

From this statement, it would appear that the system of meat inspection is not yet uniform throughout Scotland, and that the neglect in other districts adds to the work of the official in the Dundee Dead Meat Market.

Last year, I commented on the unsatisfactory nature of the slaughterhouse buildings. The question of the advisability of reconstructing the present premises or of erecting a new slaughterhouse is now under consideration by the Council, who thoroughly realise that something drastic must be done.

My attention has been drawn to the conditions under which meat is sold from stalls in a Dundee street. The inspecting officers keep a close watch on these stalls, and the storage accommodation is under the supervision of this department in accordance with section 12 of the Public Health (Meat) Regulations, 1924. It is, in my view, undesirable that meat foods should be sold from open booths, and I suggest that the Council should refuse to let stances in the Greenmarket for the sale of meat. I am informed that according to the tickets on the meat a better price is at times obtained than that charged in first-class shops. If that is so, the poorer classes cannot suffer from the disappearance of these booths. It must be admitted that meat cannot be kept clean when exposed to the dust of the wind-swept streets, and the proper handling of the commodity is impossible in the absence of proper facilities for cleansing the hands and appliances.

The arrangements for the proper functioning in Dundee of the Milk and Dairies (Scotland) Act, 1914, which came into operation on 1st September, 1925, were nearly com-
Milk Supply.

pleted at the end of the year. The proposed arrangements were described in a special report on the subject submitted in December, 1925. The bye-laws prepared in terms of the Act came into operation on 3rd November, having been approved by the Scottish Board of Health and the regulations for regulating in terms of Section 3 (5) of the Act, the duties, etc., of the veterinary inspector have been prepared, and early in the present year, approved by the Board. The registration of dairymen required under the Act was completed before the end of the year. There is no doubt that in some cases the requirements of the new bye-laws are not fulfilled to the letter, but it is hoped that great improvements will result from frequent inspection, not only in the matter of the structure but also in the methods employed in handling the milk during production and distribution. I hope to be able to accompany the chief sanitary inspector on a special survey of dairy premises before the end of the present year. Only one application for registration was refused, the premises concerned being entirely unsuitable.

The results of the bacteriological examination of 72 samples of milk taken at various points in the course of delivery to consumers, are given by Professor Tulloch on page 146. These results are somewhat better than those for the year 1924. They include four samples of high-grade milks, namely two of certified milk and two of grade A. (tuberculin tested) milk. The reports on these special designation samples were very satisfactory. *B. coli* was not found in 1 c.c. in any of the four, and the total counts were well within the required limits. Several samples of milk sold as pasteurised were examined. Occasionally the bacterial limit was exceeded, in which case an explanation was asked for from the seller. In all cases, however, it is the custom to send a copy of the bacteriologist's report on a sample of graded milk to the licensee concerned. This is done whether the results are good or bad.

Tubercle bacilli were not recovered from any of 24 samples of milk submitted for examination. During the last five years, 108 samples of milk have been examined for tubercle bacilli. In three cases, or less than 3 per cent., the result was positive,

Some 7,500 gallons of milk are distributed daily in Dundee. Of that amount about 3,800 gallons, that is, more than 50 per cent., are pasteurised in terms of the Milk (Special Designations) Order. There may be differences of opinion in regard to the value of pasteurisation, but I must say that under the present conditions of milk production and distribution, I am strongly in favour of pasteurised milk and encourage its use. That is so, however, only if a high grade designated milk is not available. Unfortunately in Dundee there is only a small quantity of certified milk and of grade A. (tuberculin tested) milk on sale, and the price which must be charged is prohibitive for a large section of the population. Pasteurised milk on the other hand is sold in Dundee at the same price as raw milk, and may be obtained in bottles. We have had several outbreaks of milk-borne infections in the city lately, but not one of them was associated with milk sold as pasteurised. The Dundee evidence on the subject is therefore that pasteurised milk is a safe milk, and that its use should be encouraged until there is available a sufficient supply of a high-grade raw milk at a low price.

The habit of purchasing milk in sealed bottles is growing. It is a good habit and should be cultivated. Not so long ago, bottled milk was scarcely obtainable in Dundee. Now, some 1,900 gallons of milk are distributed every day in sealed bottles to Dundee houses. Most of that milk is pasteurised, a certain amount is sterilised, and a small quantity is certified milk. The public should refuse to accept other than bottled milk, especially if it is to be used for infant feeding.

A limited outbreak of scarlet fever due to milk occurred in April. The milk was produced in the county of Forfar, and the Dundee outbreak was part of a larger outbreak which involved the county. The dairy farm believed to have been responsible was visited by Dr. Sinclair and myself, and the former took all the necessary precautions to prevent the further infection of the milk. These were successful. The evidence pointed to the milk having been infected by a woman milker who contracted the disease in a house in another part of the county. Altogether 10 cases in 8 houses in Dundee are believed to have been infected by the milk. All the houses were of the better-class type in the west end of the city.

A very extensive outbreak of food poisoning occurred in the city in August. Some 373 persons were affected, and although there were no deaths, many people were seriously ill. The causative organism was the bacillus enteritidis (Gærtner) and the food responsible was milk produced just outside the city and distributed within the city. As a special report of this outbreak was not submitted to the Public Health Committee, this opportunity is taken to give some details of the circumstances attending the outbreak.

At 1 p.m. on Friday, 20th August, 1926, a medical practitioner called at the Public Health Office to enquire if there were any cases of food poisoning in the city, as he was attending a household of four persons, two of whom were suffering from gastro-enteritis of a suggestive nature. The department had no information of any other such cases, but at 2 p.m. the same day, another medical practitioner telephoned that he had under his charge, on three farms—A, B, and C, some 20 persons suffering from gastro-enteritis, apparently caused by infected food.

Farm B is just within the boundary of the city, and the other two—Farms A and C—just outside the boundary at the same point. All three are worked by one farmer, who resides at Farm A.

Farm B, on which three families reside, was immediately visited. In one house, all of the six inmates were found to be suffering from gastro-enteritis, the first patient having taken ill late on Wednesday night, 18th August, and the other on Thursday, 19th August. In another house, 9 out of 10 inmates were affected, the first patient showing signs on Wednesday night and the others on Thursday. In the third house, all the 4 inmates were in bed suffering from gastro-enteritis, the illness commencing in this house on Thursday night in two cases, and Friday morning in the other two.

All the evidence pointed to milk as being responsible for the outbreak, and subsequent enquiry confirmed that view, and further, proved that the milk produced at Farm A on Wednesday, 18th, and on the morning of Thursday, 19th August, was mainly responsible.

Immediately the milk was suspected, Farm A was visited. As this farm is outside the Dundee boundary, I tried to get in touch with Dr. Sinclair, the County Medical Officer, but failed. As the matter was rather urgent, it was decided to act without his sanction. Later in the day, Dr. Sinclair expressed his entire approval of our action. At Farm A, there are about 50 cows housed in two byres. Some 142 gallons of milk are produced daily, and the whole of this amount, less a certain quantity distributed to workers on the three farms, is sold to a milk dealer, who calls for it twice a day and distributes it to his customers in the west end of the city. At the time of my visit with Inspector Craig of this department, on the Friday afternoon, I learned that a cow had been ill some days. The animal had, the day before, been examined by a veterinary surgeon, and on his advice, removed from the rest of the herd and isolated in a shed. I was informed that this animal had not produced any milk for some days, but after careful enquiry I satisfied myself that it was producing milk, and that until the animal was isolated on the Thursday, its milk was mixed with the milk of the other cows and distributed. The cow was obviously suffering from a very severe enteritis. It died on Sunday morning, 22nd August, and the carcase was disposed of, by burial, with all necessary precautions.

The farmer was warned of the necessity for strict isolation of the sick cow, and instructions were given regarding the precautions which had to be taken.

A list of customers was obtained from the milk dealer, and their houses visited. The visiting inspectors obtained information regarding the persons affected in each house and issued the necessary instructions regarding the milk. Where medical practitioners were not in attendance the patients were informed of the probable nature of the illness.

A circular letter was sent to all medical practitioners in the city informing them of the outbreak and asking for information regarding cases.

The medical officer in charge of the Bacteriological Laboratory (Dr. Craigie, in the absence of the Director, Professor Tulloch) was warned that a large amount of material would be sent to him for examination, and a number

of specimens were collected and forwarded to him. These specimens included samples of the actual milk believed to have caused the infection, and obtained from infected houses; samples of milk taken from the sick animal; a specimen of blood from the sick animal and a sample of the alvine discharge; a number of specimens of stools of infected persons, and a number of specimens of blood from infected persons.

On the following morning (Saturday), I met Dr. Sinclair and Mr. Spreull, Veterinary Surgeon, on the farm, and Dr. Sinclair took over the supervision of the dairy premises, etc.

It is believed that there were 373 cases in 192 households. Of these, 269 cases in 134 houses were enquired into. The outbreak was confined to two separate districts of the city. One of these is the area of distribution of milk by the milk purveyor in the west end of the city. The other is on the north-west boundary of the city and is represented by the three farms, A, B, and C. In the western district, there were 317 cases, and in the north-west district, 56 cases.

All the affected households were supplied directly or indirectly with milk produced at Farm A.

There were no deaths.

The age distribution of the 373 patients was as follows:—
Under one year—59; 5-15 years—42; over 15 years 272.

Dr. Craigie established beyond any doubt that the cause of the outbreak was the B. enteritidis (Gærtner). Evidence in support of this conclusion is contained in a separate report which was prepared by Dr. Craigie. I cannot overestimate the valuable assistance given by Dr. Craigie in the investigation, and take this opportunity of expressing my appreciation of the manner in which he performed the bacteriological work in the absence of Professor Tulloch.

Probably the source of infection of the milk was dealt with when the sick animal was removed from the herd on Thursday, 19th August. Within an hour of the information reaching the department, the cause of the trouble was traced, and the immediate precautions, outlined above, taken. Little more required to be done, but the milkers at Farm A,

Wm. Craigie

six in number and all of whom were patients, were not permitted to return to duty until they had been proved by bacteriological methods to be free from infection. Dr. Sinclair of the County supervised the measures of disinfection and the disposal of the carcase. He also kept under observation for some time all the other cows comprising the herd. I understand that no other cow showed signs of a similar illness.

The milk dealer was naturally very distressed at the occurrence, and as his business suffered considerably during the period of the outbreak, an opportunity was taken, immediately the outbreak was over, to inform medical practitioners and others that the milk purveyed by him was believed to be free from danger.

The two outbreaks dealt with in the last two sections emphasise the importance of milk as a vehicle of infection and the necessity of extreme care being exercised in its production and distribution. In one of the outbreaks, the milk supply of a dairy was infected because one of the herd was not a healthy animal but was suffering from an infection capable of being transmitted to man. Its milk contained the organism responsible for its illness, and being mixed with the milk of other cows, it infected a considerable number of people who consumed it. When it was realised that the cow was seriously ill, it was removed from the herd, but too late to prevent a severe outbreak of food poisoning. In the other outbreak, the cows were not responsible, but the milk was infected immediately after production by a person engaged in handling it who was, although unaware of it, in the incipient stages of scarlet fever.

Milk and
Epidemic
Disease.

Within comparatively recent years, Dundee has had other experiences of the close relationship between milk and epidemic disease. In 1924, an extensive outbreak of food poisoning occurred in the city, over 700 persons being infected. The food responsible was the cream in cream cakes. In this case, neither the cows nor the persons handling the milk from which the cream was made could be blamed, but the evidence was suggestive that the cream was contaminated by rodents, probably mice, while in storage in a cellar. Again, in the winter of 1919-1920, 108 cases of typhoid fever, with several deaths, occurred in Dundee.

This outbreak was the result of the infection of milk in a dairy farm in the city by a boy who was proved to be suffering from an unrecognised attack of enteric fever contracted outwith the city while on holiday.

Preservative
Regulations.

In October, a brief special report was submitted to the Public Health Committee on the administration of the Public Health (Preservatives, etc., in Food) Regulations (Scotland), 1925, of which the principal provisions came into operation on 1st January, 1927. Certain amending regulations have since been issued.

Factory and
Workshop Act.

The work which falls to be performed by inspectors of the local authority was carried out as usual. The tabular statement required by the Home Office is reproduced in Table XXXVIII., and the Chief Sanitary Inspector deals with the subject in his report.

Infectious
Disease.

The infectious diseases did not prevail to quite the same extent as in 1925. The number notified and intimated was 3,961, compared with 5,444 the preceding year. A slight decline in the scarlet fever prevalence and the absence of measles and whooping cough entirely account for the lower figure. Scarlet fever and diphtheria were both epidemic. The hospital accommodation was again stretched to its utmost, and of the 3,961 cases, 2,127 or 53.69 per cent. received treatment in hospital. The death-rate from the principal epidemic diseases was .79, compared with 1.70 in 1925 and 1.69 in 1924.

Some comments are given in the following sections on each of the ordinary infections, and several tables showing statistical details will be found in the statistical section of the report.

Diphtheria.

In my last annual report, the year 1925 was described as a record one for diphtheria, but the number of notifications received that year was exceeded in 1926, when 786 notifications of the disease were made. The figure for 1925 was 648. Last year, however, there were fewer deaths, namely 66, compared with 78 in 1925. The disease death-rate was 38.8 per 100,000 population, not so high as that for the immediately preceding year, but still a very unsatisfactory figure (Table XIII.).

Of the deaths 51 were at ages under 5 and 63 at ages under 10 years. The case-mortality was 8.4 per cent., a comparatively low figure for Dundee. The prevalence was fairly uniform throughout the year, with a tendency to excessive prevalence in November, and even more so, in December. This proved to be the start of a fairly severe epidemic, which lasted until March of the present year.

Provision was made, with the approval of the Council, to enable those who desire it, to be tested and, if necessary, immunised against diphtheria. One has to be very careful in making promises regarding the efficacy of any new method of conferring permanent immunity against disease. Should the results not be in conformity with the promises made, confidence in the department is certainly liable to suffer. In the case of diphtheria, however, it appears to be safe to promise protection provided it is made clear that the immunity may take a considerable time to develop after the last immunity dose has been given. In some cases, many months may be required. One patient, under treatment in the hospital just now with a very severe attack of diphtheria, received three doses of the toxin-anti-toxin mixture over a year ago. Before immunisation, the Schick test was positive, but a re-Schick was not done. Up to now we have dealt principally with persons liable to be exposed to infection and with children under 5 years of age, although the facilities provided are available to everyone. Besides dealing with in-patients and hospital staff, a special out-patient clinic is held one day every week during afternoon and evening for the immunisation of any persons who attend on their own initiative or who are sent by medical practitioners or epidemic officers. Many contacts of notified cases of infectious disease, having been advised by the epidemic officers, visit the clinic. Children over six months and under five years are immunised without a preliminary Schick. Persons over five years are Schicked and the positives immunised. A certain number of children are immunised at the child welfare centres, but no organised attempt has yet been made to deal with school children. Medical practitioners are provided free of cost with the immunising material for use in private work.

Last year, 1,404 Schick tests were performed in Dundee. Of that number 17 persons did not return for reading. The following is an analysis of the results in the remaining 1,387.

Age Groups.	Total.	Number positive.	Percentage positive.
Under 5 years ...	204	145	71.07
5-15 years ...	821	416	50.67
Over 15 years ...	362	106	29.3
	<u>1,387</u>	<u>667</u>	<u>48.09</u>

As already stated, 17 of the 1,404 persons Schicked did not return for reading. The defaulter rate under this heading (1.21 per cent.) is quite satisfactory. Two of those who showed negative Schick tests were subsequently suspected to be suffering from diphtheria. They both had positive throat swabs, but the clinical evidence did not support a diagnosis of diphtheria. They were considered to be temporary carriers. Ten of the 667 persons showing positive Schicks contracted diphtheria at a later date.

A total of 1,084 persons were immunised. That is to say, each one received three intra-muscular injections of toxin-anti-toxin mixture (1 c.c. dose) at intervals of one week. 3252 injections were therefore given. Of the 667 persons showing positive Schick tests (*v.* above table), 596 were immunised, while 488 persons, mainly children under five years of age, were immunised without a preliminary test. The details are given in tabular form below.

Age Group.	Immunised after showing positive Schick.	Immunised without preliminary Schick.
Under 5 years ...	135	463
5-15 years ...	380	25
Over 15 years ..	81	—
	<u>596</u>	<u>488</u>

Total—Persons, 1,084 ; Injections, 3,252.

Of the 667 positive Schicks, 71 did not complete the prescribed course. In 39 cases, no injections were given. In 13, one immunisation dose, and in 19, two doses were given. Again, 23 persons not previously Schicked, began the course, but did not complete it, 18 receiving one dose and 5 two doses. In this fashion, 79 injections were given to persons who must be considered as defaulters. These injections are not included in the total shown in the table.

Of the 1,084 persons immunised, 14 were later suspected to be suffering from diphtheria. Two of these showed no evidence clinically or bacteriologically of diphtheria. Six

were considered to be temporary carriers. The remaining six were all accepted as cases of diphtheria, the suggestive clinical evidence being confirmed in the laboratory. The time elapsing after the last immunising dose varied as follows:—

- 1 ($3\frac{3}{4}$ yrs.). Very mild—notified 3 months and 24 days after last dose.
- 2 (6 yrs.). Very mild—notified 1 month and 8 days after last dose.
- 3 (2 yrs.). Mild—notified 4 months and 8 days after last dose.
- 4 ($4\frac{3}{4}$ yrs.). Moderate—notified 10 days after last dose.
- 5 (15 yrs.). Moderate—notified 6 months and 4 days after last dose.
- 6 (15 yrs.). Very mild—notified 4 months after last dose.

Numbers 5 and 6 were nurses on the staff of King's Cross Hospital. While all six were accepted for purposes of treatment as diphtheria, only Nos. 4 and 5 can be considered as undoubted.

According to last year's experience in Dundee, Schick testing and immunisation by toxin-anti-toxin mixture are perfectly safe procedures. The immunity test does not cause the slightest discomfort to anyone, and in children the toxin-anti-toxin injections are also free from discomfort. Adults, however, frequently suffer from pain at the site of the injection, and occasionally severe local reactions occur. The immunisation of adults is not, however, an important matter, except in cases of special liability to exposure to infection, as, for example, fever hospital nurses. Apart from these special cases, the immunisation of adults is not encouraged. The evidence is also in support of the generally accepted view that toxin-anti-toxin mixture confers immunity but that the immunity development may be considerably delayed. Parents and guardians are informed that the protection is not conferred immediately, otherwise it may be difficult to explain the subsequent appearance of diphtheritic membrane in the throat. The number of visits necessary to complete the series of injections has undoubtedly an effect on the

attendance at the special clinic, and simplification of the technique is certainly a badly needed improvement. The same difficulty will not be met with in the immunisation of school children, as the work can be done in the school and no special visits have to be made by the parents. The age incidence of diphtheria and the age at which the majority of deaths occur therefrom point to the necessity for concentrating on children at ages under five years. For children of that age the attendance of the mother or guardian is essential, and even although a Schick test is not done it is not easy to get regular attendance for three weeks for the prophylactic treatment of a healthy child. No doubt further research will simplify the procedure, but till then it is not likely to be universally practised. Medical practitioners are somewhat slow to adopt the new development, but a few family practitioners in this district are recommending it with success to their patients. It is essential that the active support of all medical practitioners should be available, as ultimately the bulk of the work must be done by them.

Scarlet Fever.

Scarlet fever continued to prevail in epidemic form during the whole year. The number of notifications was 1,275 compared with 1,528 in 1925, which was a record year. As usual, the summer months were somewhat quieter, and there was a slight tendency towards a decline in prevalence about the end of the year. The epidemic of the disease has continued since the autumn of 1924. There are signs, however, during the present year that the epidemic has come to an end. Of the 1,275 cases, 850, or 67 per cent., were removed to hospital, and 425, or 33 per cent., were treated in their own homes. Insufficient hospital beds made it impossible to remove a greater number, but, although many cases had to be kept at home under conditions making efficient isolation impossible, the number of secondary cases was comparatively small.

There were 28 deaths from scarlet fever last year compared with 37 in 1925 and 43 in 1924. The death-rate was 16.5 per 100,000 population and the case mortality 2.2 per cent.

A small amount of work was carried out in the Hospital in the direction of testing for susceptibility and of conferring

active immunity. These procedures are not yet sufficiently perfected to permit of their being recommended for general adoption. The following is an outline of the work done in this connection :—

Age Groups.	Dick Positive.	Dick Negative.	Dick and Immunised.	Total.
Under 5 years	22	88	32	142
5-15 years	60	148	42	250
Over 15 years	22	39	14	75
Total No. of persons...	104	275	88	467

Reference has already been made (page 25) to a small outbreak of scarlet fever resulting from the infection of a milk supply. Apart from this group, no other exceptional condition was found to be responsible for any specific number of cases.

The department received 25 notifications of enteric fever, and the presence of the disease was confirmed in 23. Of these, 8 proved to be suffering from typhoid fever, and in 15 the causative organism was the *b. paratyphosus B*. Five of the cases of paratyphoid fever formed a family outbreak, consisting of father, mother, and three children. The father was a missed case, and was under treatment for some time for rheumatic fever. It was only during his convalescence and after the occurrence of illness among the other members of the family that the true nature of his complaint was suspected. Paratyphoid organisms were found in his stools, and there can be no doubt that he infected his wife and children, although the source of his own infection was not found. In five other patients, it was proved that the infection had been contracted outwith Dundee. The remaining cases occurred at various times throughout the year, and did not appear to have anything in common. Only one death occurred during the year—a case of paratyphoid fever.

Information was received of 77 cases of measles and 149 cases of whooping cough. Only 7 cases of these two infections were removed to hospital. One death was certified as due to measles and 4 as due to whooping cough. The fact that these diseases did not prevail last year is mainly responsible for the fall in the death-rate from the principal epidemic diseases, and to some extent for the fall in the general death-

Enteric
Fever.

Measles and
Whooping
Cough.

rate. The cases occurred fairly uniformly throughout the year. The urgent need for hospital beds for the treatment of cases of measles and whooping cough was not felt last year, but it is hoped that Dundee will not have to pass through another epidemic of either of these two diseases without additional bed accommodation.

Influenza. Influenza was the certified cause of 36 deaths. It appears to have been comparatively severe on old people, for 17 of the deaths were of persons over 65 years of age. A sharp outbreak of influenza occurred in April, when 14 deaths occurred. During that month 21 out of an annual total of 40 notifications of influenzal pneumonia were received. The other cases and deaths occurred fairly uniformly throughout the year.

Pneumonia. There were notified 375 cases of primary pneumonia and 40 cases of influenzal pneumonia, a total of 415 compared with 446 in 1925 and 499 in 1924. The majority of the cases occurred in the winter and spring months, while the heaviest month was April, with 65 primary pneumonia and 21 of the influenzal type. The incidence of primary pneumonia appeared to be particularly high in children, the age period under five years suffering most, and next to that, children at school ages. The death-rate was also highest in children of pre-school age.

Nearly half the cases received treatment in the wards of the Royal Infirmary.

Ophthalmia Neonatorum. A total of 64 notifications were received. Of these, 9 cases are recorded as having been severe in type. Six cases were treated in hospital, 4 in King's Cross Hospital, 1 in the Maternity Hospital, and 1 in the Eastern Hospital. No impairment of vision occurred. The health visitors paid 1,055 visits to cases of this disease.

Puerperal Fever. Fifteen notifications of puerperal sepsis were made and ten deaths were certified as being due to this cause. The circumstances attending each death were carefully investigated and the details recorded. Dr. Dickson, the child welfare medical officer, gives in her report some particulars regarding the 15 notified cases. The numbers for the year

suggest that notification of this disease is not by any means being efficiently carried out. The case mortality is far too high. With 10 deaths, there must have been many more than 15 cases. The matter is an important one, and although there may be difficulties in diagnosis in a number of cases, still it can only be assumed that certain medical practitioners are not carrying out the duties imposed on them by the Infectious Disease (Notification) Act, 1889. Any evidence that this is so in a particular case can only lead to a prosecution. In the interests of the public, it is the only course open to the Local Authority. In September, the Scottish Board of Health issued a circular letter dealing with the hospital treatment of puerperal sepsis and urging local authorities to make adequate provision for all cases. The Board laid down four requirements which they considered as essential in any scheme for the hospital treatment of puerperal sepsis. These are :—

(a) Permanently available accommodation where treatment can be afforded under the best hospital conditions, with the use of a theatre or suitable side-room where operative treatment can be carried out ;

(b) Adequate safeguards against infection from other diseases ;

(c) The services of a specialist in gynæcology ; and

(d) A resident medical officer.

Acting on instructions, I submitted a special report on the subject in November. This report dealt with the position in Dundee, and contained certain recommendations of which the following is a summary :—

(1) That the Medical Officer of Health be instructed to admit as many cases as possible of puerperal sepsis to King's Cross Hospital.

(2) That, when the proposed pavilion at Ashludie Sanatorium is completed, all cases of puerperal sepsis requiring hospital treatment be housed in King's Cross Hospital.

(3) That an intimation be sent to the Directors of the Royal Infirmary to the effect that the Town Council hope to relieve them of cases of puerperal sepsis from the Dundee area. The Directors should, however, be asked if they are willing to give their assistance for a time to the extent of admitting for treatment any cases of puerperal sepsis which, owing to lack of accommodation, cannot be admitted to King's Cross Hospital. The Town Council would, of course, pay the cost of maintenance of such patients.

(4) That Dr. Margaret Fairlie, medical officer in charge of the Ante-Natal Clinic, be appointed Specialist in Ante-Natal Hygiene and Gynæcology under the Child Welfare Scheme, including King's Cross Hospital.

(5) That the Town Council agree to the policy of co-operation with neighbouring local authorities with a view to concentrating the hospital treatment of puerperal sepsis from the smaller areas in King's Cross Hospital.

These recommendations were accepted by the Council and approved by the Board. The scheme came into operation during the present year, and medical practitioners were informed of the new arrangements. It is hoped that full use will be made of them, and that patients will be given the advantage of skilled treatment in hospital at the earliest possible moment.

Nine cases of encephalitis lethargica were notified, and at the time of notification all of them were in the later stages of the disease. In only three cases is the onset of illness recorded as occurring in 1926. The cases received treatment in various institutions, including the Royal Infirmary, the Eastern Hospital, and King's Cross Hospital. Two patients were sent to Stobhill Hospital, Glasgow, under the special arrangements made by the Scottish Board of Health for the hospital treatment of patients in the late stages of the disease. There is in Dundee a number of such cases requiring prolonged institutional treatment.

Infantile diarrhoea accounted for 35 deaths compared with 38 in 1925 and 50 in 1924. There were 5 notifications of cerebro-spinal fever, 1 of malaria, 2 of infective jaundice, 2 of infantile paralysis, and 2 of polio-encephalitis, 168 of erysipelas and 534 intimations of chickenpox. No special action was called for in regard to any of these diseases.

The work under the tuberculosis scheme was continued as usual during the year. Reference has already been made to the fact that the tuberculosis mortality figures were the lowest on record. Dr. Hunter reports a slight rise in the notifications of pulmonary tuberculosis, but the number of notifications each year cannot be considered as being in any way an exact measure of prevalence. Certain it is that the death-rate is definitely declining and that the notifications during recent years, especially of pulmonary tuberculosis, are not nearly so numerous as they were in the early years of the campaign. Detailed statistics are given in Tables VII., IX., and XXIV. to XXVIII. and Chart 3. A commencement was made in October with the erection of the new tuberculosis dispensary, which forms part of the Public Health Institute. It should be ready for occupation early in 1928. The plans for the extension to be made at Ashludie Sanatorium, reported on fully last year, are still under consideration. It is not likely to be possible to commence building until next year.

Dr. Hunter gives in his report details of the work done at the various institutions included in the scheme. He draws special attention to the value of the artificial sunlight lamps recently installed in the Tally Street premises. His experience justifies the more complete installation proposed for the new dispensary at Salem Street. In reference to Ashludie Sanatorium, he emphasises the necessity for X-ray equipment. The treatment of patients by artificial pneumothorax has been carried out under serious difficulties, arising from the absence of the information obtainable only by X-ray examination. A complete installation is, however, included in the plans of the new pavilion at Ashludie. The accommodation for children suffering from tuberculosis at Sidlaw Sanatorium was considerably increased by the directors of that institution, and by arrangement, an allowance of £3000 is now set aside in the annual estimates of the Public Health

Department for the maintenance of children sent by the tuberculosis medical officer. The old figure was £2000, and the increase means that the Council have now the use of about 25 beds instead of 17 as formerly.

Venereal
Diseases
Scheme.

There was no new development in the venereal diseases scheme requiring to be reported on. The position is exactly as described in reports of recent years, except that the building of the new centre in the Public Health Institute has commenced. It will probably be possible to vacate the present temporary premises early next year. Dr. Averill, in his report on page 125, describes the work actually done in the various centres. He deplores the fact that patients suffering from venereal diseases do not come for treatment promptly, but are inclined to put off until treatment is less likely to be successful. According to figures he quotes, the year 1926 compares in this respect unfavourably with the year 1925.

The total number of new cases, namely, 1019, is the highest since 1921. A point worthy of note is the marked increase in the number of new cases attending the women's centre found to be suffering from syphilis. During the last two years, 243 men and 467 women attended the centres for the first time on account of syphilis. The very marked difference between the sexes is difficult to explain, and appears to be a recent development, for in the two years 1923 and 1924, of the new cases, 312 men and only 287 women were noted as suffering from syphilis.

The following are the numbers of new cases found to be suffering from syphilis during the last few years:—

	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.
Men	186	359	533	423	203	177	135	128	115
Women	269	278	552	454	171	137	150	203	264
	455	637	1,085	877	374	314	285	331	379

There has been a steady decline in the male figure since the peak year, 1920, but the female figure has risen steadily since 1923.

The gonorrhœa figures for the same years, recorded below, are very different :—

	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.
Men	60	241	277	292	236	159	226	240	254
Women	18	12	9	40	35	94	63	58	44
	78	253	286	332	271	253	289	298	298

The yearly totals remain fairly constant, but the male figures always exceed the female figures by a large margin.

A literal interpretation of the above tables would mean that syphilis in the male is declining steadily, but that it is increasing in the female, while the incidence of gonorrhœa remains fairly constant in both sexes, with, if anything, a slight decline among females.

The increase last year in the new cases found not to have venereal disease is satisfactory, and suggests that there is a growing tendency to take advantage of the facilities available at the centres. It may be that when the new centre in Salem Street is opened, patients will come for treatment at an earlier stage. At any rate, it will certainly be better known than any of the existing centres, and there should be less excuse for anyone failing to attend immediately the presence of venereal disease is suspected. It must be admitted that there is some excuse now.

The difficulty in securing the continued attendance of patients for treatment until cure is established is still apparent. Last year nearly 50 per cent. of the patients ceased to attend without the permission of the special medical officers. It is some satisfaction to know that 268 patients, or 40 per cent. of the total, continued to attend until discharged after completion of treatment. The position is somewhat better among men patients than among women patients, but there is little evidence of any improvement from year to year. The average annual number of attendances per patient under treatment during each of the last six years was as follows :—

Year ending May,	1922.	1923.	1924.	1925.	1926.	1927.
Attendance per patient ...	14	21	20	18	17	18

Not much improvement is shown in these figures. A system of notification and compulsory treatment has been brought forward as the only means of solving the problem. There can be no doubt that public money is being thrown away by certain patients who are careless of their own health and of the health of their families. Firm measures must be employed in dealing with such individuals, and compulsory measures cannot be much longer delayed. Meantime in Dundee we await the completion of the Public Health Institute with its Venereal Diseases Department. The provision of skilled treatment in suitable premises in an accessible situation will, we hope, reduce the defaulters considerably. Compulsory measures for those requiring it will then have to be seriously considered, as a local measure, unless by that time a national move has been made.

The amount of venereal disease work done by medical practitioners in private practice, general or special, in the city is of course unknown. A rough measure may be made from the number of doses of arsenobenzol compound issued to private medical practitioners. That information is contained in Table XLI. The number of doses issued last year represents over 14 per cent. of the total issue, a higher percentage than ever before. Every encouragement is given to medical practitioners to carry out treatment in private, as there are many patients who are not prepared to attend at the centres. It is expected that doctors in the city and neighbourhood will pay more frequent visits to the treatment centre at Salem Street than they do to the present centre. A certain number of patients suffering from venereal disease receive treatment in other institutions in the city. To these institutions there were issued last year 264 doses of arsenobenzol compound.

Tables XL. to XLII., and those included in Dr. Averill's report, contain statistical matter relative to the venereal diseases scheme.

This subject was dealt with fully in last year's report. The position is exactly the same now. We are still working under difficulties due to an insufficient number of beds. The plans of the additions at Ashludie are still under consideration, and building cannot commence until some time in 1928.

The new pavilion at Ashludie is intended to relieve King's Cross Hospital, so that the measles pavilion, now being used for tuberculosis, can receive cases of measles and whooping cough, the diseases for which it was erected over twelve years ago. The difficulties are, if anything, more acute because accommodation has now to be found in King's Cross Hospital for patients suffering from puerperal fever.

The Public Health (Scotland) Amendment Act, 1925, ^{Diabetes and Supply of Insulin.} enacts that the powers of a local authority under the Public Health (Scotland) Act, 1897, shall include power to make such arrangements as they may think fit, and as may be sanctioned by the Scottish Board of Health for providing medicines and treatment to persons who are suffering from diabetes, and who, in the opinion of the local authority, require assistance in obtaining such medicines and treatment. The Town Council took advantage of the power thus granted, and, after considering a short special report on the subject, agreed to the recommendations contained therein. As a result a supply of insulin is now available, free of charge, to all persons resident in Dundee suffering from diabetes and who are not in a position to purchase it themselves. A number of patients have already taken advantage of these facilities.

The bacteriological work required by the Department was ^{Bacteriological Laboratory Services.} performed in the usual efficient manner by Professor Tulloch and his staff at the University College. A record of the work done during 1926 is submitted by Professor Tulloch (page 137). On 15th May, 1926, a new arrangement came into operation whereby a fixed sum is paid annually by the Town Council of Dundee to the University of St. Andrews in consideration of which the University carry out in their laboratories, and under the direction of Professor Tulloch, all the bacteriological work which is required by the Public Health Department. The arrangement is working exceedingly well. The clerical work has been reduced considerably, and greater use is being made of the laboratory.

The work of extending and altering the principal child welfare centre in Victoria Road is now well forward, and the ^{Maternity Service and Child Welfare.} enlarged institution will be ready for occupation before the

end of the present year. Much more satisfactory work will be possible in the new premises. The branch centres and the day nurseries will require to be considered next, and certain proposals on the subject will be submitted to the Public Health Committee at an early date.

The various units comprising the scheme remain as described in previous annual reports, but the work done last year was greater than usual. This was to some extent the result of the industrial situation. On the other hand, the comparative absence of measles and whooping cough relieved the staff in that particular direction. Apart from the child welfare work done in hospitals, homes, and day nurseries, the health visitors paid 32,709 visits. In 1925 the number paid was 32,182. The total attendances at the various clinics numbered 32,836, compared with 17,831 in 1925. These figures give a general idea of the volume of the work done. The staff of health visitors has been enlarged from time to time, but the medical staff remains the same. The services, part-time at least, of another medical officer will be required, and a recommendation to this effect will be included in a special report to be submitted dealing with the branch centres and the day nurseries.

In the following paragraphs, comments on the scheme are made under the various headings as instructed by the Scottish Board of Health.

Infantile Mortality.—There were 382 deaths among infants under one year of age, giving a rate of 103 per 1000 births. Table X. on page 57 shows the deaths classified according to causes and arranged in age groups. The rate per 1000 births at each of the age groups is as follows :—

Age Group.	No. of deaths.	Rate per 1000 deaths.
Under 1 week	131	35.2
1 week and under 4 weeks ...	53	14.2
4 weeks and under 3 months ...	58	15.6
3 months and under 6 months ...	79	21.2
6 months and under 12 months...	62	16.6

Births.—The births registered in 1926 numbered 3,724. Of these 3,468 were legitimate and 256 were illegitimate. The illegitimate rate was 6.9 per cent. The details regarding notified births, nature of attendance, and number of stillbirths are given on page 112.

Maternal Mortality.—Table XXIX. shows the number of deaths resulting from miscarriage, child-birth, and puerperal sepsis, and Table XXX shows the maternal mortality rate each year since 1919.

Midwives (Scotland) Act, 1915.—On page 113 will be found the report by the Inspector of Midwives on the working of this Act during the year 1926.

Home Visitation, Ante-Natal Consultations, etc.—Full information regarding home visits is given in Dr. Dickson's report, and regarding ante-natal consultations in Dr. Fairlie's report (page 121). There were 120 post-natal consultations.

Child Welfare Consultations.—Until October, 1926, there were six weekly sessions of about 2½ hours each, and a weighing centre at Broughty Ferry with one weekly session, and one monthly medical consultation. Since October, there has been one extra session in the Blackness Road Clinic, making seven weekly sessions in all. The total number of attendances was 14,450 for infants under one year and 11,792 for children over one year. Of first attendances, there were 1,086 infants under one year and 199 of children over one year. Detailed information regarding the illnesses recorded will be found in Dr. Dickson's report. In regard to rickets, the medical officer reports that only 6 of the 1,055 babies under one year examined showed definite clinical signs of rickets on admission to the clinics. All the cases were slight. Of the 195 children examined at ages from 1 to 5 years, 99, or 50.7 per cent., showed some definite clinical signs of the disease. The majority of the cases noted (51) were children between 1 and 2 years of age.

Special Treatment Centres.—Reports by Dr. Gordon Campbell, the Dental Specialist, and Dr. Fulton, the Medical Officer in charge of the Special Venereal Disease Clinic at the Child Welfare Centre, will be found on pages 120 and 123.

No insulin was supplied to children at ages under five years. There were 1,788 attendances made at the ultra-violet rays clinic in the principal child welfare centre by 23 infants, and 109 children suffering from marasmus and incipient rickets, etc.

Day Nurseries.—There are four day nurseries maintained by the Corporation and one day nursery and one nursery school which are maintained by voluntary effort, but which receive financial assistance from the Council. The attendances are given in detail in the report on the child welfare scheme. The charge made at the municipal day nurseries is 4s. per week of five days for each child, with an extra charge of 6d. for Saturday, and a certain reduction when more than one member of a family are in attendance at the same time. The receipts last year amounted to about £690.

Food and Milk.—The number of applications for assistance of this nature was 189 and 3,555 received from 72 mothers and 566 children respectively, all of whom were certified as necessitous. The expenditure involved was about £2, 536 with no receipts. Details regarding the provision of free food, etc., is contained in Dr. Dickson's report (page 103).

Measles, Whooping cough, Ophthalmia Neonatorum, Epidemic Diarrhœa.—These disease are dealt with under the appropriate headings in this report, and in detail in Dr. Dickson's report.

Hospitals, Homes, etc.—There is no maternity hospital or home included in the Dundee Maternity and Child Welfare Scheme. The Dundee Maternity Hospital is part of the Royal Infirmary. A Home for unmarried mothers, before and after confinement, is maintained by the Salvation Army and an annual grant of £50 is given by the Dundee Town Council. The cases are admitted not only from Dundee but from districts outwith the city. The Infant Hospital, Broughty Ferry, works in close co-operation with the Public Health Department, and cases are admitted on the recommendation of the child welfare medical officer at a charge of 6s. 2d. per day. The annual expenditure is usually about £2300. The details of the number of patients admitted and the conditions treated are given in Table XXXIX.

Educational.—Four special lectures were given to midwives on subjects connected with their work, and the opportunity is taken at the sewing classes for mothers, which are conducted in connection with three of the clinics, to give instruction in matters relating to the hygiene of infants. Details of the work done in these special classes are given by Dr. Dickson in her report. In October a refresher course for health visitors was held. The course lasted two weeks, and 24 health visitors from districts out-with the city of Dundee attended. The course comprised lectures and demonstrations on general and special subjects connected with child welfare, tuberculosis, school medical inspection and venereal diseases.

Other Activities.—Certain of the voluntary institutions associated with the Public Health Department and child welfare work, such as the Salvation Army Hostel, the Lochee Day Nursery, and the Nursery School, have been already referred to. The staff of the Dundee Eye Institution are prepared to advise in all cases of serious ailments of the eye affecting children attending the clinics, and reports are submitted in each case, with advice as to treatment. The Local Authority pay an annual grant of £10 10s. for these services. The Dundee Voluntary Health Workers' Association supply voluntary workers to act as clerks for the clinics and also organise sewing classes. Last year they provided 891 garments to be sold or given free at the clinics and 274 garments for the use of children attending the day nurseries. The work of this Association is very much appreciated.

Details of the work done under these Regulations are contained in Tables XXXIII., XXXIV., and XXXV. No special action was called for in connection with infectious disease, and no cases were removed to the infectious diseases hospital.

The Public Health (Port Administration Infectious Diseases) Regulations (Scotland), 1921.

A large number of lectures on different health subjects was given during the year by medical and other members of the staff of the department to various audiences. In the course of the winter just finished, the Public Health Committee, in association with the Scottish Committee of the British Social Hygiene Council, organised two health lec-

Health Lectures.

tures which were held in the Y.M.C.A. Hall. The subjects and lecturers were :—" Healthy Womanhood " (Professor Winifred Cullis, London), open to women only, and " Sunlight and Disease " (Dr. Marcus Paterson, London). Under the joint auspices of the Alliance of Honour, the Public Health Committee of Dundee Town Council and the Scottish Committee of the British Social Hygiene Council, two cinema exhibitions were given, one for men and one for women, in the Caird Hall. The film shown was " The Gift of Life." The speakers were Rev. J. E. Roberts, Dr. Robert Forgan, and Dr. Elizabeth Smith, all of Glasgow. All these lectures were very well attended, especially the last two.

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TABLES AND CHARTS.

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TABLE I.

AGE and SEX DISTRIBUTION of POPULATION, 1926.

Population (estimated by Registrar General), **170,060**

Percentage of Males to total population (Census, 1921) 44.4%.
 " " Females " " 55.6%.
 Estimated Sex Distribution for 1926 :—Males, 75,507.
 Females, 94,553.

Age Groups.	Percentage to total at all ages (Census 1921).		Estimated Age and Sex Distribution for 1926.		
	Males.	Females.	Males.	Females.	Both Sexes.
0- 5	10.0	7.7	7,551	7,280	14,831
5-10	10.1	8.1	7,626	7,659	15,285
10-15	10.9	8.8	8,230	8,321	16,551
15-25	18.8	19.0	14,195	17,965	32,160
25-35	13.6	15.3	10,269	14,466	24,735
35-45	12.1	13.5	9,136	12,765	21,901
45-55	11.8	12.1	8,910	11,441	20,351
55-65	7.8	8.5	5,890	8,037	13,927
65-75	3.8	5.0	2,869	4,728	7,597
75-85	1.0	1.8	755	1,702	2,457
85 and over	.1	.2	76	189	265
All ages	100.0	100.0	75,507	94,553	170,060

TABLE II.

Estimated Population in various Wards, 1926.

WARD.	Population (Census 1921).	Percentage to total Population (Census 1921).	Estimated Population for 1926.
I.	14,506	8.6	14,625
II.	12,500	7.4	12,584
III.	15,946	9.5	16,156
IV.	18,766	11.2	19,047
V.	22,401	13.3	22,618
VI.	17,731	10.5	17,856
VII.	18,049	10.7	18,196
VIII.	18,880	11.2	19,047
IX.	18,614	11.1	18,877
X. & XI.	10,922	6.5	11,054
Total	168,315	100.0	170,060

TABLE III.

Return Showing the Causes of Death (Corrected for Transfers) at the Different Age periods during 1926:—

CAUSE OF DEATH.	ALL AGES.		AGE.										75—	85 & Over.
	Total.	Males, Females.	—1	1—	5—	10—	15—	25—	35—	45—	55—	65—		
Enteric Fever ...	1	1	...	1	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	1	1	...	1	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	28	16 12	3	13	6	2	1	...	3	...	...	...	...	...
Whooping Cough ...	...	1	3	3	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	66	30 36	4	47	12	2	1	...	...	...	...	...	...	...
Influenza ...	36	15 21	1	2	1	...	3	...	4	4	4	11	5	1
Encephalitis Lethargica ...	3	1	...	...	...	...	1	...	...	2	...	...	...	...
Cerebro-Spinal Meningitis ...	5	5	1	3	1	...	...	...	...	...	...	...	...	...
Other Epidemic Diseases... ..	5	...	...	...	...	...	1	...	...	1	1	...	...	...
Tuberculosis of Respiratory System ...	138	67 71	...	...	...	4	34	30	30	20	15	5	...	...
Tuberculous Meningitis ...	19	9 10	4	9	3	2	1	...	...	1	...	...	...	...
Tuberculosis of Intestines and Peritoneum ...	14	10 4	1	2	4	1	2	2	2	2	...	...	...	...
Other Tuberculous Diseases ...	19	11 8	1	3	1	1	5	2	2	2	...	...	...	...
Malignant Tumours ...	272	115 157	...	...	...	...	1	3	18	51	83	79	31	6
Rheumatic Fever ...	6	6	...	...	1	1	1	1	1	1	...	...	...	...
Meningitis (not Cer.-Spin. or T.B.) ...	10	5	...	4	1	...	...	...	1	2	...	...	...	...
Apoplexy ...	221	92 129	...	...	...	...	2	1	2	11	44	86	61	14
Heart Disease ...	298	129 169	...	...	3	1	5	8	14	33	53	107	64	10
Diseases of Arteries ...	46	23 23	...	...	...	...	...	...	...	4	9	12	15	6
Bronchitis ...	146	60 86	7	1	...	1	...	...	6	8	26	54	31	12
Pneumonia (all forms) ...	219	104 115	57	35	5	1	7	7	8	16	14	34	31	4
Other Diseases of Respiratory System ...	36	20 16	2	4	1	...	...	1	2	5	10	4	6	1
Diarrhea and Enteritis (under 2 years) ...	35	16 19	31	4	...	...	...	...	...	...	...	...	...	...
Appendicitis ...	12	5 7	...	1	2	2	3	2	1	1	...	...	...	...
All Liver Diseases (not Malignant) ...	26	7 19	...	...	...	1	2	1	2	1	9	5	5	...
Nephritis (Acute and Chronic) ...	71	35 36	2	4	...	1	1	4	2	16	16	21	3	1
Puerperal Sepsis ...	10	10	...	...	...	...	2	5	3	...	...	...	...	...
Other Diseases and Accidents of Pregnancy and Parturition ...	23	23	...	...	...	...	3	13	7	...	...	...	...	...
Diseases of Early Infancy and Malformations ...	120	93 23	212	1	...	...	...	...	...	...	...	...	...	...
Suicide ...	21	12 9	...	...	...	...	...	...	7	3	7	3	1	...
Other Violent Deaths ...	76	45 31	15	5	2	5	4	5	8	7	9	9	4	3
Other Defined Diseases ...	385	185 200	35	10	3	1	9	13	26	28	53	75	91	41
Causes ill-Defined or Unknown ...	49	24 25	3	3	1	1	...	1	4	7	11	9	9	...

TABLE IV.

Death Rates at various age-periods (from all causes)
each year.

1922 - 1926.

Age Periods.	1922.		1923.		1924.		1925.		1926.	
	No. of Death-	Deaths, Rate.	No. of Death-	Deaths, Rate.	No. of Death-	Deaths, Rate.	No. of Death-	Deaths, Rate.	No. of Death-	Deaths, Rate.
All ages	2793	16.7	2517	14.7	2809	16.4	2825	16.7	2514	14.8
0- 5 years	652	43.4	685	46.0	797	53.4	764	51.7	539	36.3
5-10 ..	39	2.5	47	3.1	55	3.6	53	3.5	47	3.1
10-15 ..	34	2.0	22	1.3	29	1.7	27	1.6	27	1.6
15-25 ..	114	3.5	105	3.2	107	3.3	131	4.1	89	2.8
25-35 ..	121	4.8	104	4.2	108	4.3	114	4.6	99	4.0
35-45 ..	185	8.3	137	6.2	139	6.3	152	7.0	152	6.9
45-55 ..	287	13.9	201	9.8	237	11.6	259	12.8	224	11.0
55-65 ..	381	27.0	361	25.7	409	29.1	368	26.5	364	26.1
65-75 ..	545	70.5	454	59.1	477	62.0	403	390.2	517	68.1
75-85 ..	361	144.8	322	130.0	376	151.5	480	64.6	357	145.3
85 and over	74	260.5	79	280.1	75	265.0	365	149.2	99	373.6

TABLE V.

Death-rate (from all causes) in various Wards each year
since 1917.

Whole		W A R D S.									
Year.	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.
1917	14.7	15.7	17.5	14.0	13.9	13.0	17.8	13.9	15.2	11.8	11.6
1918	17.4	17.6	20.6	18.3	14.3	17.0	19.8	16.8	18.3	13.9	14.2
1919	15.2	15.5	15.5	14.3	14.7	12.6	16.4	12.2	13.8	15.1	15.3
1920	15.8	10.2	16.7	16.9	15.1	13.6	18.1	14.6	15.2	14.1	10.2
1921	15.8	15.2	16.5	15.2	15.3	13.8	17.4	14.2	16.9	13.5	12.8
1922	16.7	16.0	17.0	18.1	15.5	14.4	18.1	15.0	18.1	15.3	14.0
1923	14.7	15.0	14.0	14.8	14.0	12.8	16.4	15.0	15.4	14.3	12.1
1924	16.4	15.7	16.6	17.2	14.8	13.5	18.6	16.5	17.6	16.6	13.4
1925	16.7	17.8	15.3	18.4	15.9	15.3	16.8	15.2	17.6	18.6	12.8
1926	14.8	15.7	15.5	10.7	14.0	12.5	14.8	14.5	15.5	14.1	13.2

TABLE VI.

Infantile Death-rate (per 1,000 births) in various Wards
each year since 1919.

Whole		W A R D S.									
Year.	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.
1919	126	137	156	152	119	114	114	90	139	138	122
1920	131	131	153	150	142	141	150	87	131	133	52
1921	114	130	121	103	101	109	130	131	114	96	99
1922	109	81	101	136	121	109	115	99	125	98	76
1923	98	89	79	121	76	119	121	78	88	92	74
1924	120	104	114	137	121	112	133	108	96	136	71
1925	120	156	128	162	124	113	119	85	150	123	57
1926	103	114	75	110	94	96	100	100	132	93	66

TABLE VII.

Death-rate in various Wards in each year since 1919 from 6 principal Epidemic Diseases, namely Enteric Fever, Scarlet Fever, Diphtheria, Infantile Diarrhoea, Measles and Whooping Cough.

Whole		W A R D S.									
Year.	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.
1919	.69	.89	.37	.78	.52	.76	.78	.67	.63	1.04	0
1920	1.05	1.15	.00	1.18	.96	.93	1.95	.78	.89	1.09	.34
1921	1.09	1.00	1.15	1.04	.99	.93	1.56	1.37	1.24	1.04	.37
1922	.80	1.00	.72	.66	.67	.95	1.03	.89	.84	.43	.54
1923	1.17	1.65	.97	1.03	.77	1.00	1.48	1.29	1.75	1.12	.36
1924	1.69	1.51	2.42	1.93	1.54	1.48	2.67	1.45	1.59	1.71	.36
1925	1.70	1.58	1.60	2.49	1.27	.57	.90	.82	1.21	.37	.27
1926	.79	.96	.72	1.24	.79	1.60	1.69	1.32	2.21	1.70	.45

TABLE VIII.

Pulmonary Tuberculosis Death-rate in various Wards each year since 1919.

Whole		W A R D S.									
Year.	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.
1919	.89	.89	1.64	1.40	.57	.64	.89	.56	.93	.27	.76
1920	.99	.90	1.35	1.29	.81	.81	1.21	.88	.93	.56	.51
1921	1.00	1.12	1.23	1.04	.99	.80	1.33	.85	1.13	.74	.56
1922	.98	.54	1.12	.95	.87	1.17	1.18	.72	1.16	.92	.63
1923	.98	1.24	1.05	1.15	.82	.69	1.03	.89	1.27	.93	.45
1924	.85	1.30	.56	.54	.92	.65	1.13	1.00	.95	.88	.45
1925	.87	.89	.80	1.12	.74	.80	1.12	.08	.79	1.06	.55
1926	.81	.96	.79	.87	.32	.93	.56	.77	.95	1.17	.54

TABLE IX.

Tuberculosis (all forms) Death-rate in various Wards each year since 1919.

Whole		W A R D S.									
Year.	City.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10 & 11.
1910	1.34	1.27	2.16	1.02	.90	.92	1.68	.97	1.37	1.36	1.18
1920	1.37	1.02	1.57	1.63	1.05	1.21	1.95	1.09	1.38	1.37	.63
1921	1.35	1.62	1.81	1.00	1.30	.98	1.68	1.31	1.40	1.04	.65
1922	1.37	.82	1.44	1.31	1.43	1.51	1.80	1.00	1.63	1.36	.63
1923	1.43	1.65	1.46	1.45	1.29	1.18	1.71	1.34	1.86	1.32	.64
1924	1.23	1.51	.80	1.33	1.18	1.04	1.64	1.40	1.48	1.07	.54
1925	1.22	1.37	1.12	1.37	1.11	.98	1.41	1.10	1.37	1.38	.82
1926	1.12	1.43	1.19	1.18	.53	1.19	.73	1.21	1.26	1.54	.63

TABLE X.

Certified causes of death at the various ages
under 1 year for 1926.

CAUSE of DEATH.	Under 1 week	1 and under 2 weeks	2 and under 3 weeks	3 and under 4 weeks	Total under 4 weeks	4 weeks and under 2 mths	2 and under 3 months	3 and under 6 months	6 and under 9 months	9 and under 12 months	Total Deaths under 1 year
Measles ...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	...	...	...	...	...	...	...	...	1	2	3
Whooping Cough ...	...	...	...	...	...	1	...	...	...	...	1
Diphtheria and Croup	...	...	...	...	...	...	...	1	1	2	4
Tuberculosis {											
Lung ...	...	...	...	...	...	...	...	...	...	...	...
General ...	...	...	...	...	...	...	1	...	...	...	1
Abdominal ...	...	...	...	...	...	...	...	...	...	1	1
Brain ...	...	...	...	...	...	...	...	...	4	...	4
Other Forms ...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (not T. B.)	...	1	...	...	1	...	...	1	1	1	4
Convulsions ...	4	1	...	...	5	2	...	2	4	1	14
Pneumonia (all forms)	...	2	2	2	6	4	3	23	9	14	59
Bronchitis ...	1	...	...	1	2	...	1	1	1	1	6
Laryngitis ...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis'...	...	...	...	...	...	5	8	9	6	3	31
Other Digestive Diseases...	1	1	...	1	3	...	...	2	3	...	8
Congenital Malformations ...	13	3	1	1	18	4	1	3	...	...	26
Premature Birth ...	58	10	...	1	69	2	1	...	...	...	72
Atrophy, Debility, and Marasmus ...	28	8	5	6	47	11	6	23	4	...	91
Atelectasis ...	4	...	...	...	4	...	...	...	...	...	4
Injury at Birth ...	4	...	...	...	4	...	...	...	...	...	4
Suffocation, Overlaying ...	6	2	...	...	8	1	3	4	1	...	17
Syphilis ...	...	...	...	...	...	...	1	1	...	...	2
Rickets ...	...	...	...	...	...	...	...	...	...	...	...
All Other Causes ..	12	3	...	2	17	3	...	9	1	...	31
Totals ...	131	31	8	14	184	33	25	79	36	26	383

The annual Return of the Registrar-General gives the
total deaths under 1 year as 382.

TABLE XI.

Infant Mortality from various groups of causes 1890-94,
and each year from 1913.

Year.	Con- genital.	Diges- tive.	Respira- tory.	Infectious Diseases.	All Other Causes.	Total.
Average						
1890-94	53	32	44	25	20	183
1913	62	40	28	12	20	162
1914	58	33	15	17	13	136
1915	64	38	38	51	18	209
1916	63	20	15	13	15	126
1917	57	24	24	13	19	137
1918	53	16	24	20	13	126
1919	60	13	30	8	15	126
1920	53	21	36	10	11	131
1921	58	16	19	13	8	114
1922	50	11	27	10	11	109
1923	46	4	21	13	14	98
1924	54	12	25	12	17	120
1925	53	10	35	16	12	126
1926	58	11	18	4	12	103

TABLE XII.

Deaths and Death-rates from various groups of causes
each year since 1922 (all ages).

DISEASE GROUP.	1922. Pop. 172,061.		1923. Pop. 170,901.		1924. Pop. 171,295.		1925. Pop. 169,361.		1926. Pop. 170,060.	
	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.	No. of Deaths.	Rate per 1000 Population.
Congenital	214	1.24	203	1.18	225	1.31	200	1.18	216	1.27
Digestive	157	.91	113	.66	137	.80	137	.81	137	.81
Respiratory	551	3.20	401	2.34	502	2.93	518	3.06	401	2.36
Infectious	458	2.66	458	2.68	512	2.99	511	3.02	351	2.06
Circulatory	329	1.91	309	1.80	378	2.21	414	2.44	330	2.06
Genito-Urinary	101	.58	81	.47	97	.56	90	.53	94	.55
Malignant	267	1.55	261	1.53	273	1.59	295	1.74	272	1.60
Nervous	272	1.58	270	1.58	256	1.49	265	1.57	285	1.68
Other causes	444	2.58	421	2.46	429	2.50	395	2.33	408	2.40
Totals	2793	16.23	2517	14.72	2809	16.39	2825	16.63	2514	14.78

TABLE XIII.

Five-yearly average annual death-rates per 100,000 population from certain of the Infectious Diseases 1876-1920, and, number of deaths and death-rates per 100,000 each year since 1921.

YEAR.	Smallpox.		Scarlet Fever.		Enteric Fever.		Typhus Fever.		Diphtheria.		Measles.		Whooping Cough.	
	No. of Deaths.	Death rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.	No. of Deaths.	Death-rate per 100,000.
1876-1880	—	.1	—	26.5	—	22.3	—	10.4	—	29.1	—	52.7	—	84.4
1881-1885	—	.1	—	14.7	—	14.1	—	5.3	—	40.0	—	33.0	—	86.1
1886-1890	—	0	—	33.0	—	10.5	—	2.8	—	20.0	—	32.7	—	67.3
1891-1895	—	.2	—	5.7	—	17.6	—	4.0	—	19.7	—	51.5	—	64.4
1896-1900	—	0	—	14.5	—	10.4	—	2.5	—	16.1	—	36.5	—	43.9
1901-1905	—	0	—	4.1	—	10.8	—	.6	—	12.7	—	42.5	—	55.5
1906-1910	—	0	—	14.5	—	3.7	—	.7	—	25.9	—	60.8	—	42.1
1911-1915	—	.5	—	10.9	—	3.6	—	.5	—	21.0	—	41.7	—	61.2
1916-1920	—	.1	—	2.7	—	2.8	—	.2	—	18.5	—	33.1	—	15.3
1921	0	—	12	7.1	1	.6	0	—	15	8.9	14	8.3	66	39.2
1922	0	—	7	4.1	0	—	0	—	23	13.4	45	26.2	19	11.0
1923	0	—	14	8.2	3	1.8	0	—	34	19.9	91	53.2	43	25.2
1924	0	—	43	25.1	1	.6	0	—	44	25.7	116	67.7	35	20.4
1925	0	—	37	21.8	0	—	0	—	78	46.1	80	47.2	55	32.5
1926	0	—	28	16.5	1	.6	0	—	66	38.8	1	.6	4	2.4

TABLE XIV.

Five-yearly average annual Case Mortality (per cent.) from certain Infectious Diseases 1891-1920, and, No. of Cases notified and intimated, No. of Deaths, and Case Mortality each year since 1921.

YEAR.	Smallpox.			Scarlet Fever.			Enteric Fever.			Typhus Fever			Diphtheria.			Measles.			Whooping Cough.		
	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.	Cases.	Deaths.	Case Mortality.
1891-1895	—	—	3.7	—	—	3.3	—	—	15.1	—	—	9.8	—	—	38.0	—	—	8.7	—	—	70.8
1896-1900	—	—	—	—	—	4.2	—	—	15.2	—	—	22.5	—	—	23.2	—	—	8.4	—	—	47.9
1901-1905	—	—	—	—	—	2.3	—	—	16.6	—	—	14.0	—	—	16.2	—	—	10.2	—	—	38.8
1906-1910	—	—	—	—	—	3.0	—	—	11.3	—	—	12.1	—	—	17.3	—	—	10.4	—	—	17.6
1911-1915	—	—	5.3	—	—	2.5	—	—	9.9	—	—	13.3	—	—	11.1	—	—	11.0	—	—	13.2
1916-1920	—	—	6.7	—	—	1.4	—	—	11.2	—	—	26.7	—	—	11.0	—	—	5.7	—	—	5.2
1921	0	0	—	380	12	3.2	7	1	14.3	0	0	—	274	15	5.5	586	14	2.4	504	66	13.1
1922	0	0	—	429	7	1.6	6	0	—	—	—	—	267	23	8.6	1255	45	3.6	363	19	5.2
1923	0	0	—	813	14	1.7	19	3	15.8	0	0	—	236	34	13.3	996	91	9.1	374	43	11.5
1924	0	0	—	1338	43	3.2	16	1	6.3	0	0	—	452	44	9.7	1828	116	6.3	518	35	6.8
1925	0	0	—	1528	37	2.4	17	0	—	0	0	—	619	78	12.0	806	80	9.9	706	55	7.8
1926	0	0	—	1275	28	2.2	25	1	4.0	0	0	—	716	66	8.4	77	1	1.3	149	4	2.7

TABLE XV.

MALIGNANT DISEASES.

Number of Deaths during each year since 1921 :—

Year.	Males.	Females.	Total.
1921	113	176	289
1922	104	168	272
1923	115	146	261
1924	103	167	270
1925	114	173	287
1926	111	154	265

TABLE XVI.

Death-rate per 10,000 population, from Malignant Diseases, each year since 1921, sexes given separately and together.

Year.	Males.	Females.	Total.
1921	15.13	18.80	17.17
1922	13.62	17.55	15.81
1923	15.17	15.36	15.27
1924	13.55	17.52	15.76
1925	15.16	18.37	16.95
1926	14.70	16.29	15.58

TABLE

Age and Sex Distribution of Deaths from Malignant Diseases

AGES		BUCCAL CAVITY				PHARYNX, OESOPHAGUS, STOMACH, LIVER and ANNEXA							PERITONEUM, INTESTINES and RECTUM											
		Jaw	Lip	Maxilla	Tongue	Bile Duct	Fauces	Gall Bladder	Liver	Oesophagus	Pharynx	Stomach	Ventriculi	Bowel	Caecum	Colon	Descending Colon	Pelvic Colon	Transverse Colon	Duodenum	Intestine	Peritonæum	Rectum	Retro-Peritoneal Cancer
Under 20	M	..	..	..	..				..	..	..	..				..		..	..	..	..	..	..	..
	F	..	..	..	..				..	..	..	..								..	..	..	..	..
20-25	M	..	..	..	..				..	..	..	..				..		..	..	..	..	..	..	..
	F	..			..				..	..	..	..								..	..	..	..	..
25-35	M	..							..	..	..	..				..		..	..				1	..
	F	..			..				..	..	..	..								..	..		..	..
35-45	M	..							..	..	2					..		..	..				1	..
	F	..	..	..	..				1	..	3					..					1		..	..
45-55	M	1	..	..	4	..	..	..	1	1	..	1	..	..	..	2	..	1	..	..	..	..	3	..
	F	..	..	..	..			..	2	..	1	7	..	1	..	1	..	..	..	1	..	..	..	..
55-65	M	1	..	1	4	..	..	1	1	5	..	12	1	1	..	1	..	1	1	1	..	..	5	..
	F	..	..	..	..			..	1	..	12	..	..	..	3	..	2	..	..	1	..	2	..	..
65-75	M	2	..	..	4	..	1	..	1	1	4	..	..	..	2	..	2	..	..	..	..	2	1	..
	F	..	..	..	..	1	..	..	5	..	1	10	1	2	4	3	1	..	1	..	..	1	..	..
75 and up	M	..	1	..	..	..	..	..	..	..	3	..	1	..	2	..	1	..	..	1	..	3	..	..
	F	..	..	..	1	..	..	..	1	1	..	5	1	..	..	2	..	1	..	2	..	..	..	..
Totals		4	1	1	13	1	1	1	10	10	3	59	3	5	4	16	1	8	2	1	5	1	18	1

XVII.

during 1926, showing parts of the body affected.

FEMALE GENITAL ORGANS			BREAST	SKIN				OTHER OR UNSPECIFIED ORGANS													TOTALS	
Cervix	Ovary	Uterus		Ear	Face	Rodent Ulcer	Temple	Abdomen	Bladder	Foot	Kidney	Larynx	Lung	Neck	Orbit	Pancreas	Prostate	Thyroid Gland	Urinary Tract	Other Parts		Not Specified
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	
..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	
2	..	5	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	
..	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	17	
..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	14	
1	3	6	4	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	1	50	
..	..	..	..	..	..	..	..	..	3	..	1	1	1	..	1	3	..	..	..	..	46	
3	1	4	4	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	82	
..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	3	1	..	..	..	27	
..	..	3	9	..	1	..	..	2	..	..	1	..	2	..	1	..	..	..	..	..	49	
..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	14	
..	..	..	1	..	..	2	1	..	1	..	1	..	..	1	1	..	..	..	..	..	22	
6	4	20	19	1	2	2	1	6	7	1	2	2	4	1	1	5	6	1	1	1	3	265

TABLE XVIII.

Five-yearly average annual Death-rates per 100,000 population 1876-1920, and, number of Deaths and Death-rates per 100,000 each year since 1920, from the Respiratory Diseases (including Bronchitis, Pneumonia (all forms), Pleurisy, Asthma, Laryngitis, etc.).

Year	Total Deaths		Death-rate per 100,000
1876-1880	...	—	508.5
1881-1885	...	—	482.3
1886-1890	...	—	463.2
1891-1895	...	—	473.2
1896-1900	...	—	419.8
1901-1905	...	—	387.1
1906-1910	...	—	345.6
1911-1915	...	—	329.5
1916-1920	...	—	327.3
1921	...	402	238.8
1922	...	552	320.8
1923	...	401	234.6
1924	...	502	293.1
1925	...	518	305.9
1926	...	401	235.8

TABLE XIX.

Five-yearly average annual Death-rates per 100,000 population 1876-1920, and, number of Deaths and Death-rates per 100,000 each year since 1921 from Diabetes Mellitus.

Year	Total Deaths		Deate-Rate per 100,000
1876-1880	...	—	—
1881-1885	...	—	1.8
1886-1890	...	—	.5
1891-1895	...	—	2.0
1896-1900	...	—	2.4
1901-1905	...	—	5.5
1906-1910	...	—	5.9
1911-1915	...	—	8.5
1916-1920	...	—	5.5
1921	...	10	5.9
1922	...	10	5.8
1923	...	17	9.9
1924	...	12	7.0
1925	...	10	5.9
1926	...	11	6.5

TABLE XX.

INFLUENZA.

Deaths in which Influenza was given as a cause, each month January 1918—December 1926.

MONTH.	1918	1919	1920	1921	1922	1923	1924	1925	1926
January ...	1	31	4	5	73	2	0	5	1
February ...	0	58	0	6	19	0	2	2	0
March ...	0	40	4	8	3	0	7	3	0
April ...	1	8	55	4	1	2	8	3	14
May ...	0	3	24	2	1	1	2	0	8
June ...	0	0	0	0	0	1	1	0	1
July ...	35	1	1	0	0	0	0	0	0
August ...	3	0	0	0	0	0	0	0	2
September ...	0	0	0	1	0	1	3	3	1
October ...	59	0	2	0	1	0	0	1	2
November ...	235	2	0	2	4	1	10	1	5
December ...	113	0	0	5	1	4	6	2	2
Totals ...	447	143	90	33	103	12	39	20	36

TABLE XXI.

Deaths in which Influenza appears as a cause in death certificate 1918-1926 classified in age periods.

AGE PERIODS.	1918	1919	1920	1921	1922	1923	1924	1925	1926
Under 1 year	14	3	3	0	4	0	1	0	1
1- 5 years	58	19	13	0	3	0	1	2	2
5-15 „	65	10	4	1	2	0	1	0	1
15-25 „	59	18	12	2	5	0	1	0	3
25-45 „	139	46	25	2	28	2	8	3	4
45-65 „	76	31	14	9	26	2	12	7	8
65 and upwards	36	16	19	19	35	8	15	8	17
Totals	447	143	90	33	103	12	39	20	36

During 1926, 6 deaths were certified as due to Influenza alone, while in 30 cases it was associated with :—

Bronchitis	...	...	...	7
Pneumonia	...	...	...	17
Other Respiratory Disease	...	...	...	3
Other causes	...	...	...	3

TABLE XXII.

INFECTIOUS DISEASES.—Number of Cases of each disease notified and reported in Dundee during the Year 1926. Also number removed and number not removed to Hospital.

DISEASE	At all ages	At Ages—Years							Cases removed to Hospital	Cases not removed to Hospital
		Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards		
Typhoid Fever ...	25	...	5	10	4	5	1	...	20	5
Scarlet Fever ...	1275	24	448	621	109	71	2	...	850	425
Diphtheria ...	786	25	280	355	75	46	5	...	712	74
Erysipelas ...	168	4	...	8	20	37	75	24	35	133
Puerperal Fever ...	15	...	...	...	4	11	...	...	9	6
Ophthalmia										
Neonatorum ...	64	64	...	...	...	...	...	...	10	54
Infective Jaundice	2	...	1	1	...	...	...	...	0	2
Malaria ...	1	...	...	...	...	1	...	...	0	1
Infantile Paralysis	2	...	1	1	...	...	...	...	1	1
Polio-Encephalitis	2	...	2	...	...	...	...	...	0	2
Encephalitis										
Lethargica ...	9	...	...	3	2	...	4	...	4	5
Acute Primary										
Pneumonia ...	375	31	115	102	46	37	28	16	180	195
Acute Influenzal										
Pneumonia ...	40	1	2	7	9	12	7	2	6	34
Pulmonary										
Tuberculosis ...	308	1	2	67	72	107	53	6	260	48
Non-Pulmonary										
Tuberculosis ...	123	7	30	41	22	13	7	3	24	99
Cerebro-Spinal										
Fever ...	5	1	3	1	...	...	...	...	5	0
*Measles ...	77	7	24	42	2	2	...	...	6	71
*Whooping Cough	149	16	61	72	...	...	...	...	1	148
*Chickenpox ...	534	18	147	368	1	...	...	...	8	526
*Anthrax ...	1	...	...	...	...	1	...	...	1	0
Totals ...	3961	199	1121	1699	366	343	182	51	2132	1829

*Not notifiable in Dundee during 1926.

Tuberculosis—cases notified in a previous year and removed to Hospital for the first time during 1926—

Pulmonary, 35 ; Non-Pulmonary. 2 ; Total, 37.

TABLE XXIII.

Monthly Notifications and Intimations of Infectious Disease,
Dundee, 1926.

DISEASE	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Typhoid Fever...	1	1	2	2	2	7	...	6	3	1	...	...	25
Scarlet Fever ...	121	83	114	89	59	80	64	106	176	187	100	96	1275
Diphtheria ...	55	69	77	62	55	35	27	37	82	70	96	121	786
Erysipelas ...	16	15	14	13	7	9	4	8	6	22	31	23	168
Puerperal Fever	1	1	1	2	2	...	...	...	4	2	...	2	15
Ophthalmia Neonatorum	5	5	12	1	6	2	5	4	9	5	6	4	64
Infective Jaundice	2	...	...	...	...	...	...	...	...	...	...	...	2
Malaria ...	...	...	...	...	...	...	...	...	...	1	...	...	1
Infantile Paralysis	...	...	...	1	...	...	1	...	...	...	...	...	2
Polio-Encephalitis	...	...	...	1	...	...	...	1	...	...	...	...	2
Encephalitis Lethargica	1	2	...	...	...	...	...	...	1	3	2	...	9
Acute Primary Pneumonia	39	24	26	65	31	21	13	17	33	36	38	32	375
Acute Influenzal Pneumonia	...	...	5	21	4	2	...	...	1	...	5	2	40
Pulmonary Tuberculosis	26	28	29	27	35	24	13	22	32	31	23	18	308
Non-Pulmonary Tuberculosis	9	8	4	25	10	20	10	11	8	7	7	4	123
Cerebro-Spinal Fever	1	...	1	...	...	1	...	...	...	1	...	1	5
*Measles...	9	15	13	10	4	6	1	1	4	5	7	2	77
*Whooping Cough	7	4	3	1	9	3	...	1	14	5	32	70	149
*Chickenpox ...	44	47	57	24	60	56	17	11	45	49	68	56	534
*Anthrax...	...	...	...	...	...	1	...	...	...	...	...	...	1
Totals	337	302	338	344	284	267	155	225	418	425	415	431	3961

*Not Notifiable in Dundee during 1926.

TABLE XXIV.

TUBERCULOSIS.—Notifications and Deaths, with corresponding rates per 1,000 population at various age-periods each year since 1917.

Year.	PULMONARY TUBERCULOSIS.										NON-PULMONARY TUBERCULOSIS.										65 & over.				
	0-5.		5-15.		15-25.		25-45.		45-65.		65 & over.		0-5.		5-15.		15-25.		25-45.		45-65.		65 & over.		
	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	
1917	Notifications	16	.81	56	1.52	114	3.27	160	3.19	79	2.58	7	.71	54	2.75	46	1.25	34	.97	30	.60	6	.10	1	.10
	Deaths	4	.20	14	.38	39	1.12	95	1.89	58	1.90	8	.81	53	2.70	29	.79	21	.60	22	.44	12	.39	3	.31
1918	Notifications	25	1.27	57	1.55	99	2.84	131	2.61	77	2.52	4	.40	50	2.54	56	1.52	54	1.55	23	.46	13	.42	5	.50
	Deaths	11	.56	23	.63	63	1.81	76	1.51	74	2.42	9	.92	25	1.27	29	.79	15	.43	10	.20	9	.29	2	.20
1919	Notifications	13	.64	72	1.92	102	2.91	180	3.38	63	2.02	12	1.19	36	1.79	38	1.01	33	.94	17	.32	10	.32	3	.80
	Deaths	4	.19	8	.21	38	1.11	71	1.35	37	1.19	7	.69	24	1.19	19	.50	13	.37	11	.21	8	.25	8	.79
1920	Notifications	13	.67	74	2.05	94	2.62	159	3.07	75	2.40	8	.84	45	2.30	39	1.05	31	.86	12	.23	5	.16	0	—
	Deaths	1	.05	7	.19	38	1.20	73	1.29	56	1.81	8	.84	31	1.61	16	.43	9	.28	8	.14	5	.16	0	—
1921	Notifications	21	1.43	57	1.81	105	3.30	128	2.77	54	1.62	8	.77	24	1.50	47	1.46	15	.47	8	.17	5	.14	2	.19
	Deaths	3	.20	5	.15	38	1.19	76	1.64	38	1.12	8	.77	17	1.15	16	.50	11	.34	8	.17	4	.12	3	.29
1922	Notifications	15	.99	66	2.05	109	3.34	130	2.75	73	2.10	8	.76	49	3.26	54	1.68	40	1.23	12	.25	7	.66	0	—
	Deaths	0	—	10	.31	36	1.10	64	1.35	53	1.53	5	.47	26	1.73	15	.46	19	.58	0	—	6	.17	1	.09
1923	Notifications	20	1.34	50	1.56	72	2.23	97	2.07	60	1.74	10	.95	50	3.35	70	2.19	52	1.61	27	.58	12	.34	5	.47
	Deaths	6	.40	11	.34	45	1.39	64	1.36	35	1.01	6	.57	35	2.34	16	.50	13	.40	6	.12	5	.14	8	.28
1924	Notifications	14	.93	43	1.50	73	2.25	101	2.15	51	1.47	8	.76	50	3.34	37	1.15	26	.80	20	.43	7	.20	2	.19
	Deaths	1	.06	8	.25	44	1.36	55	1.17	33	.96	5	.47	28	1.87	14	.44	9	.28	6	.13	7	.20	1	.09
1925	Notifications	8	.54	49	1.55	72	2.25	100	2.15	42	1.23	0	.88	36	2.44	32	1.01	27	.84	17	.37	5	.15	4	.39
	Deaths	4	.27	6	.19	39	1.22	57	1.23	36	1.05	6	.58	18	1.22	9	.28	15	.47	10	.22	4	.12	3	.29
1926	Notifications	3	.20	67	2.10	72	2.24	107	2.29	53	1.55	6	.58	37	2.49	41	1.29	22	.68	13	.28	7	.20	8	.29
	Deaths	0	—	4	.13	34	1.06	60	1.29	35	1.02	5	.48	20	1.35	12	.38	8	.25	7	.15	3	.09	2	.19

TABLE XXVII.

PULMONARY TUBERCULOSIS—Notifications and Deaths with corresponding rates per 1,000 population for each sex for each year since 1915.

Year.	NOTIFICATIONS.				DEATHS.			
	Males.		Females.		Males.		Females.	
	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.	No.	Per 1000.
1915	216	2.75	269	2.72	106	1.35	169	1.71
1916	227	2.83	295	2.92	99	1.23	160	1.58
1917	181	2.25	251	2.48	100	1.24	118	1.16
1918	198	2.46	195	1.92	117	1.45	139	1.37
1919	238	2.90	204	1.97	90	1.09	75	.72
1920	223	2.74	200	1.95	95	1.16	88	.85
1921	197	2.64	178	1.90	81	1.08	87	.92
1922	170	2.23	231	2.41	75	.98	93	.97
1923	149	1.97	160	1.68	73	.96	94	.98
1924	135	1.78	160	1.68	75	.98	71	.74
1925	125	1.66	155	1.65	61	.81	87	.93
1926	135	1.79	173	1.83	67	.89	71	.75

TABLE XXVIII.

Pulmonary Tuberculosis—Deaths in Institutions each year since 1917.

	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926
Total Deaths from										
Pulmon. T.B. -	218	256	165	183	168	168	167	147	148	138
No. of Deaths from										
Pulmon. T.B. in										
Institutions -	64	98	67	93	91	85	75	62	66	77
Percentage of Total										
Deaths from Pul.										
T.B. dying in										
Institutions	29.35	38.28	40.6	50.8	54.1	50.6	44.9	42.1	44.6	55.8

TABLE XXIX.

MATERNAL MORTALITY.

Certified causes of deaths of women from diseases and accidents connected with pregnancy and child-birth during 1926, and average numbers for 5-yearly period 1921-1925

CAUSE OF DEATH			Average Annual Number, 1921-1925	1926
Abortion, Miscarriage	...	...	1	1
Uncontrollable vomiting	...	...	0	3
Ectopic gestation	..	...	0	1
Other diseases and accidents of pregnancy			1	1
Puerperal hæmorrhage	..	...	3	4
Other accidents to parturition		...	1	1
Puerperal sepsis	..	...	9	10
Phlegmasia alba dolens, Embolism		...	1	5
Albuminuria of pregnancy, Eclampsia		...	4	4
Other diseases of puerperium		...	3	3
Puerperal diseases of Breast	...	...	0	0
			23	33

TABLE XXX.

Maternal Mortality Rates—number of deaths per 1,000 registered births each year, 1919-1926.

1919	1920	1921	1922	1923	1924	1925	1926
5.48	7.13	5.61	8.51	4.76	3.88	4.60	8.86

TABLE XXXI.

Number of births per 1,000 population, illegitimate births per 100 registered births, and marriages per 1,000 population, each year, 1914-1926.

Year.	Birth-rate.	Illegitimate-rate.	Marriage-rate.
1914	25.2	9.1	8.3
1915	22.1	8.0	9.5
1916	20.5	8.0	7.1
1917	15.6	11.2	7.0
1918	16.0	10.6	7.5
1919	18.7	11.1	10.6
1920	27.4	8.5	11.4
1921	26.5	7.7	10.0
1922	24.6	7.0	8.8
1923	24.6	7.9	8.3
1924	22.6	7.2	7.6
1925	21.8	6.4	7.6
1926	21.9	6.9	7.7

TABLE XXXII.

VACCINATION—1921–1925.

YEAR	Total Births (excluding Transcripts received)	Successfully Vaccinated		Insusceptible of Vaccine Disease		Died before Vaccination		Conscientious Objections		Postponement or unaccounted for	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
1921	4309	1191	26·4	27	·6	379	8·4	2682	59·5	230	5·1
1922	4288	1193	27·8	12	·3	323	7·5	2556	59·6	204	4·8
1923	4275	1240	29·0	11	·2	284	6·6	2567	60·1	173	4·1
1924	3921	1077	27·5	16	·4	352	9·0	2271	57·9	205	5·2
1925	3750	978	26·1	17	·4	335	8·2	2270	60·5	179	4·8

TABLE XXXIII.

The Public Health (Port Administration Infectious Diseases) Regulations (Scotland) 1921.

DETAILS OF VESSELS ENTERING THE PORT DURING 1926.

	No. of Arrivals.	Tonnage.	No. Inspected by Medical Officer.	No. Inspected by Sanitary Inspector.	No. Reported Defective.	No. of Orders Issued.
From Foreign—						
Steamers	350	459,691	—	350	184	180
Motor	6	28,378	—	6	3	3
Sail	2	181	—	2	1	1
	358	488,250	—	358	188	184
Coastwise	670	210,608	—	—	—	—
	1,028	698,858	—	358	188	184

TABLE XXXIV.

Port Sanitation.

Principal Foreign Places from which ships arrived and notes of cargoes.

PORT OR COUNTRY.	No.	CARGOES
India (Calcutta, Chittagong, and Bombay)	46	Jute, Gunnies, Cotton and Linseed
Hamburg	62	Sugar, Potash, Farina and Fancy Goods
Dunkirk	1	Sugar, and General Cargo
Rotterdam	29	Sugar, Milk, Cheese and Steel Plates
Antwerp	15	Do.
Ghent	4	Do.
Gothenburg	15	Paper and Wood
Algeria	11	Esparto Grass
U.S.A. and Canada	30	Cattle, Flour, Sugar, Timber, Pitch, & Tinned Food
Baltic Ports, Norway, etc.	66	Timber, Flax, Tar and Paper
Other European Ports	79	Coal, Cork and Pyrites

TABLE XXXV.

Port Sanitation.

Details of Action taken:—

Total Number of verbal intimations	276
Total Number of special rat notices issued	102
Total Number of visits to ships	722
Total Number of ships from infected or suspected ports	53
Do. (direct)	8
Do. (indirect)	45
Nuisances and defects attended to:—	
Forecasts cleaned out	6
Messrooms cleaned	14
Galleys and store-rooms cleaned	45
Waste food causing a nuisance	8
Water-closets choked and repaired	13
Water-closets cleaned out	69
Discharge of foul water on quay	29
Dirty and broken baths	4
Total nuisances	188
Fresh water tanks cleaned out	16
Forecasts washed	20
Baths painted	19
W.C.'s painted	25
Galleys painted or washed	15

TABLE XXXVI.

BACTERIOLOGICAL LABORATORY.

Examinations carried out on behalf of the Department by Professor Tulloch, in the Laboratory, University College, Dundee.

	1922	1923	1924	1925	1926
Wassermann Tests	3573	3418	3261	3513	3660
Microscopical and other examinations under V.D. Scheme for—					
Syphilis	125	91	68	33	35
Gonorrhoea	485	935	1589	1690	1863
Swabs for diphtheria	569	848	1188	2027	1980
Widal tests for enteric fever	65	126	158	140	220
Sputum examinations	303	317	334	385	320
Examination of faeces, blood cultures, etc., for—					
Enteric fever	24	62	64	80	91
Dysentery	3	2	0	13	6
Infantile Diarrhoea	5	7	11	8	4
Milk examination	—	66	96	97	101
Food Poisoning—					
No. of outbreaks	—	(0)	(4)	(2)	(3)
No. of examinations	—	0	146	7	71
Cerebro spinal meningitis	—	0	1	0	8
Other examinations	14	12	27	*78	*60
Totals ..	5166	5884	6943	8071	8419

*Includes 50 Rats examined for *Leptospira Icterohaemorrhagica*.

TABLE XXXVII.

DISINFECTION.

The table submitted below details the year's work in regard to disinfection.

MONTH		Beds	Mattresses	Rugs	Blankets	Sheets	Wearing Apparel	Miscellaneous Articles	Total No. of Articles	No. of Houses from which clothes were removed
January	...	3	22	393	399	349	576	692	2434	174
February	...	5	18	424	411	375	755	801	2789	174
March	...	7	27	435	390	347	878	978	3062	187
April	...	2	19	398	339	318	522	580	2178	162
May...	...	4	11	288	299	236	564	565	1967	127
June	...	1	29	341	244	256	482	588	1941	134
July ...	..	48	30	215	144	189	265	391	1282	83
August	...	233	12	314	523	256	359	527	2224	132
September	...	3	26	436	368	409	647	909	2798	212
October	...	32	14	507	517	421	721	796	3008	232
November	...	2	17	463	451	416	747	803	2899	224
December	...	2	48	440	408	384	779	787	2848	201
		342	273	4654	4493	3956	7295	8417	29430	2042

The following figures relate to the articles disinfected and the houses concerned each year since 1920 :—

	1920	1921	1922	1923	1924	1925	1926
Articles	20,917	18,078	17,480	20,074	26,763	32,978	29,430
Houses concerned	1,204	1,103	1,025	1,322	1,535	2,234	2,042

TABLE XXXVIII.

FACTORIES, WORKSHOPS AND WORKPLACES.

YEAR 1926.

1 Inspection of Factories, Workshops and Workplaces, including
Inspections made by Sanitary Inspectors.

PREMISES		NUMBER OF		
		Inspec- tions	Written Notices	Occupiers Prosecuted
Factories (including factory laundries)		176	0	0
Workshops (including workshop laundries)		1,537	3	0
Workplaces (other than outworkers' premises)		309	0	0
		2,022	3	0

2. Defects found in Factories, Workshops and Workplaces

PARTICULARS	NUMBER OF DEFECTS			No. of Offences in respect to which Prosecu- tions were Instituted
	Found	Remedied	Referred to H.M. Inspector	
Nuisances under the Public Health Acts†—				
Want of cleanliness	87	87		
Want of ventilation	3	3		
Overcrowding				
Want of drainage of floors				
Other nuisances				
Sanitary accommodation—				
Insufficient	4	3		
Unsuitable or defective				
Not separate for sexes				
Offences under the Factory and Workshop Acts—				
Illegal occupation of underground bakehouse (S. 101)				
Other offences				
(excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
Total	94	93		

†Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901,
as remediable under the Public Health Acts.

TABLE XXXIX.

DUNDEE INFANT HOSPITAL.

Year to 31st December, 1926.

In Hospital, 1st January, 1926	33
Admitted	164
	197
Discharged—	
Relieved	75
Unrelieved	0
Taken home against advice	17
Sent to Royal Infirmary	4
Sent to King's Cross Hospital	15
Sent home for disinfection	25
	136
	61
Died—	
Marasmus	12
Marasmus and pneumonia	7
Uraemia	1
Bronchitis	1
Broncho-pneumonia	1
Gastro-enteritis	2
Congenital syphilis	1
Pyloric stenosis	1
Asphyxiation	1
	27
In Hospital, 31st December, 1926	34
Highest Daily Number	34
Lowest Daily Number	13
Average Daily Number	30.34
Average Daily Number	31.1 (on occupied days).
Total patient days	11,074

The Hospital was closed for 9 days in December, 1926,—Scarlet Fever.

The Cases treated were:—

Marasmus	93	Enteritis	4
Infantile dyspepsia	8	Hare lip and cleft palate	1
Fits	1	Tuberculous abdomen	2
Rickets	11	Broncho-pneumonia	8
Debility	14	Tuberculous meningitis	1
Decomposition (intestinal)	8	Pyloric stenosis	1
Bronchitis	3	Lobar pneumonia	1
Congenital syphilis	3	Ileo colitis	1
Uraemia	1		
Accident	1		164
Secondary anaemia	2		

TABLE XL.

VENEREAL DISEASES SCHEME, 1923-24 to 1926-27.

Patients suffering from Venereal Diseases, attending the V.D. Centres, who:—

Year.	Left before completing a course of treatment.				Left after completing a course of treatment, but before final tests as to cure.				Were transferred to other centres.				Were discharged from centre after completion of treatment.				Totals.										
	Males.		Females.		Males.		Females.		Both Sexes.		Males.		Females.		Both Sexes.		Males.	Females.									
	No. Cent.	Per	No. Cent.	Per	No. Cent.	Per	No. Cent.	Per	No. Cent.	Per	No. Cent.	Per	No. Cent.	Per	No. Cent.	Per											
1923-4	193	38	122	33	71	52	126	25	73	20	53	39	66	13	60	17	6	4	118	24	111	30	7	5	503	366	137
1924-5	179	28	73	20	106	39	119	19	42	11	77	29	79	12	57	15	22	8	263	41	198	54	65	24	640	370	270
1925-6	238	36	114	29	124	46	98	14	61	16	32	11	72	11	52	13	20	7	263	30	162	42	101	36	666	389	277
1926-7	216	32	88	24	128	41	104	15	38	10	66	21	88	13	64	18	24	8	268	40	174	48	91	30	676	364	312

TABLE XLI.

Doses of Arseno-Benzol Compounds Issued.

		Treatment Centre.	Other Institutions.	Medical Practitioners.	Total.
1919	...	1,958	13	141	2,112
1920	...	6,362	18	472	6,852
1921	...	6,280	239	358	6,877
1922	...	5,135	239	239	5,613
1923	...	5,224	198	123	5,545
1924	...	3,887	275	504	4,666
1925	..	2,836	341	398	3,575
1926	...	2,286	264	423	2,973

TABLE XLII.

LABORATORY WORK—The following examinations were carried out under the V.D. scheme during each of the last eight years :—

		1919	1920	1921	1922	1923	1924	1925	1926
Wassermann Tests ..	..	1,301	3,019	4,084	3,573	3,418	3,261	3,513	3,660
Microscopical and other Examinations ..	..	691	900	870	610	1,555	1,657	1,723	1,898
		1,992	3,919	4,954	4,183	4,973	4,918	5,236	5,558

TABLE XLIII.

Unsound Food. All Seized at the Public Slaughter-Houses.

Number of Seizures, Weight (in lbs.) of Meat Seized, and Reasons for Seizure.
FOR YEAR ENDING 31st DECEMBER, 1926.

DISEASE	BEEF		MUTTON		PORK		TOTAL	
	Number	Weight	Number	Weight	Number	Weight	Number	Weight
(a) Tuberculosis ...	...	1,445	...	...	72	2,210	1,517	159,201
(b) Other Diseases :—								
Pneumonia ...	43	2,906	11	231	1	22	55	3,159
Fevered Conditions ...	59	12,573	67	2,274	3	175	129	15,022
Septic Conditions ...	30	10,538	17	1,025	2	137	49	11,700
Rheumatism ...	14	1,420	...	...	...	...	14	1,420
Fractures and Bruises ...	68	7,277	34	275	10	147	112	7,699
Dropsical Conditions ...	33	4,241	112	1,688	...	...	145	5,929
Inflammation of Abdominal Organs ...	63	3,475	8	128	2	41	73	5,644
Anthrax ...	2	1,412	...	...	...	...	2	1,412
Decomposition ...	31	5,978	35	1,232	...	...	66	7,210
Actinomycosis ...	23	445	...	...	...	...	23	445
Abscesses, Tumours, and Cysts ...	52	695	9	73	1	13	62	781
Wasted Conditions ...	5	575	9	277	...	...	14	852
Lymphadenitis ...	2	328	...	...	...	...	2	328
Totals ...	1,870	208,854	502	7,203	91	2,745	2,263	218,802

TABLE XLIV.

Shews the numbers of the different kinds of Animals Slaughtered at the Public Slaughter-houses each month during 1926, also the numbers of their carcasses found to be Diseased or Unsound, and the weights of each class seized and destroyed.

MONTH	Animals Slaughtered				Numbers of their Carcasses Diseased or Unsound				Weights (in lbs.) condemned from Carcasses of Animals Slaughtered on the Premises				
	Cattle	Calves	Sheep	Pigs	Cattle	Calves	Sheep	Pigs	Beef	Veal	Mutton	Pork	Total
1926													
January ...	1,088	1	1,760	260	173	..	25	13	12,916	...	420	471	13,807
February ...	1,076	...	1,722	300	203	...	23	12	13,406	...	231	415	14,052
March ...	1,268	7	2,053	345	246	4	44	7	10,221	160	428	894	11,703
April ...	1,135	5	1,859	192	207	1	53	7	10,384	56	353	470	11,243
May ...	1,197	1	1,838	133	294	1	32	6	15,763	42	367	156	16,328
June ...	1,220	2	1,938	103	294	2	34	12	15,897	75	415	831	17,218
July ...	1,060	23	1,662	61	262	...	21	5	15,471	...	212	549	16,032
August ...	1,218	3	1,903	70	306	1	12	6	14,680	55	124	311	15,170
September ...	1,290	4	2,132	123	311	2	23	5	17,813	95	255	239	18,402
October ...	1,221	5	2,141	192	252	1	28	11	16,551	45	245	588	17,225
November ...	1,235	2	2,718	315	238	1	26	15	13,856	80	410	510	14,856
December ...	1,350	1	2,711	363	244	...	46	21	11,211	...	428	500	11,939
Totals ...	14,338	54	24,437	2,457	3,030	13	367	118	168,169	586	3,886	5,334	177,975

TABLE XLV.

Shows the numbers of the different kinds of Carcases, dressed and undressed, brought to the Slaughter-houses, each month during 1926, with the numbers found to be diseased or unsound, and the weight of each class seized and destroyed on that account.

MONTH	Carcases brought in				Numbers of them Diseased or Unsound				Weight (in lbs.) Seized and Condemned from Carcases brought in			
	Cattle	Calves	Sheep	Pigs	Cattle	Calves	Sheep	Pigs	Beef	Veal	Mutton	Pork
1926												
January ...	554	5	300	14	12	...	21	1	2,322	...	512	11
February ...	254	6	307	31	8	...	16	1	2,195	...	454	56
March ...	268	14	233	9	18	3	21	...	4,839	140	514	...
April ...	218	15	310	5	18	1	17	...	5,192	6	516	...
May ...	269	10	371	12	11	1	7	...	2,217	11	251	...
June ...	167	6	334	17	10	1	14	2	2,194	62	544	55
July ...	278	5	387	1	6	...	5	...	3,011	...	229	...
August ...	246	4	286	1	4	1	4	...	2,258	57	125	...
September ...	255	4	483	4	6	...	2	4	2,860	...	104	65
October ...	276	7	447	15	12	...	16	...	2,864	...	452	...
November ...	256	8	159	18	8	1	22	1	2,955	97	525	108
December ...	290	7	362	2	18	1	11	..	4,609	104	425	...
Totals ...	3,131	91	3,979	129	131	9	156	9	55,494	457	4,605	271
Table XLIV.	14,338	54	24,437	2,457	5,030	13	367	118	168,169	586	5,886	5,334
Total of Tables XLIV and XLV.	17,469	145	28,416	2,586	3,161	22	525	127	203,663	1,043	8,491	5,605
												218,802

TABLE XLVI.

The following is a synopsis of the organs seized and condemned in addition to the foregoing at the Slaughter-houses for the full year :—

CATTLE ORGANS			SHEEP ORGANS			PIGS' ORGANS		
Cows' Udders	...	191	Livers	...	77	Udders	...	11
Livers	...	1433	Plucks	...	163	Plucks	...	186
Lungs	...	1126	Kidneys	...	42	Kidneys	...	18
Hearts	...	375	Lungs	...	87	Livers	...	33
Kidneys	...	94						
Heads	...	393						
Tongues	...	501						
Skirts	...	66						

TINNED AND FROZEN MEAT SEIZED FOR DECOMPOSITION

Frozen Meat	...	...	...	207 lbs.
Tinned Eggs	...	...	...	11 „
				218 „

The number of Carcases wholly or partially condemned for Tuberculosis during each year for the last five years were as follows :—

YEAR	Bulls	Bullocks	Heifers	Cows	Calves	Sheep	Pigs	Total
1922	16	93	22	260	5	1	65	462
1923	25	166	17	263	...	...	41	512
1924	36	211	14	319	1	...	81	662
1925	87	602	14	550	2	...	88	1,343
1926	94	812	19	520	...	...	72	1,517

TABLE XLVII.

The totals for the years 1906 to 1925 (excluding 1915 to 1918) were:—

Year.	Carcases Examined.				Numbers Diseased or Unsound.				Weight (in lbs.) of Meat Seized and Condemned.				
	Cattle.		Calves.		Sheep.		Pigs.		Beef.	Veal.	Mutton.	Pork.	Total.
	Cattle.	Calves.	Calves.	Sheep.	Calves.	Sheep.	Pigs.	Pigs.					
1906	19,127	891	34,676	4,690	603	51	230	46	177,705	2,318	8,664	5,931	194,618
1907	19,439	904	34,763	5,157	562	56	253	52	145,114	2,554	9,686	3,989	161,343
1908	19,137	684	33,759	5,052	588	45	264	61	159,519	1,936	9,487	6,193	177,135
1909	19,714	780	47,363	3,490	597	53	218	57	158,354	2,579	7,511	6,019	174,463
1910	19,957	664	41,782	3,255	602	38	167	53	160,085	1,942	6,184	5,084	173,295
1911	19,015	561	40,611	4,132	582	33	179	55	154,380	1,851	7,322	6,657	170,210
1912	18,836	574	38,896	4,339	573	39	173	71	150,502	2,194	7,160	7,106	166,962
1913	19,206	515	34,929	2,744	633	45	131	24	155,996	2,115	5,807	2,086	166,004
1914	18,664	427	34,672	3,401	549	38	156	52	134,341	1,811	6,595	3,624	146,371
1919	19,743	268	38,156	4,381	463	45	228	95	135,692	2,328	8,281	1,494	147,795
1920	20,933	250	29,795	2,386	627	51	170	58	174,715	2,955	6,707	5,931	190,308
1921	17,914	182	26,357	2,717	633	32	214	52	144,858	2,278	9,353	4,572	161,061
1922	18,825	207	31,139	4,199	879	38	350	120	188,971	1,762	13,537	6,974	211,244
1923	18,756	138	26,286	3,570	958	33	318	113	219,803	2,022	12,319	8,962	242,506
1924	18,276	184	25,691	4,037	1,382	18	485	242	209,771	714	13,219	9,875	233,579
1925	18,139	198	25,831	3,669	1,561	11	344	141	165,533	578	8,321	5,449	179,881

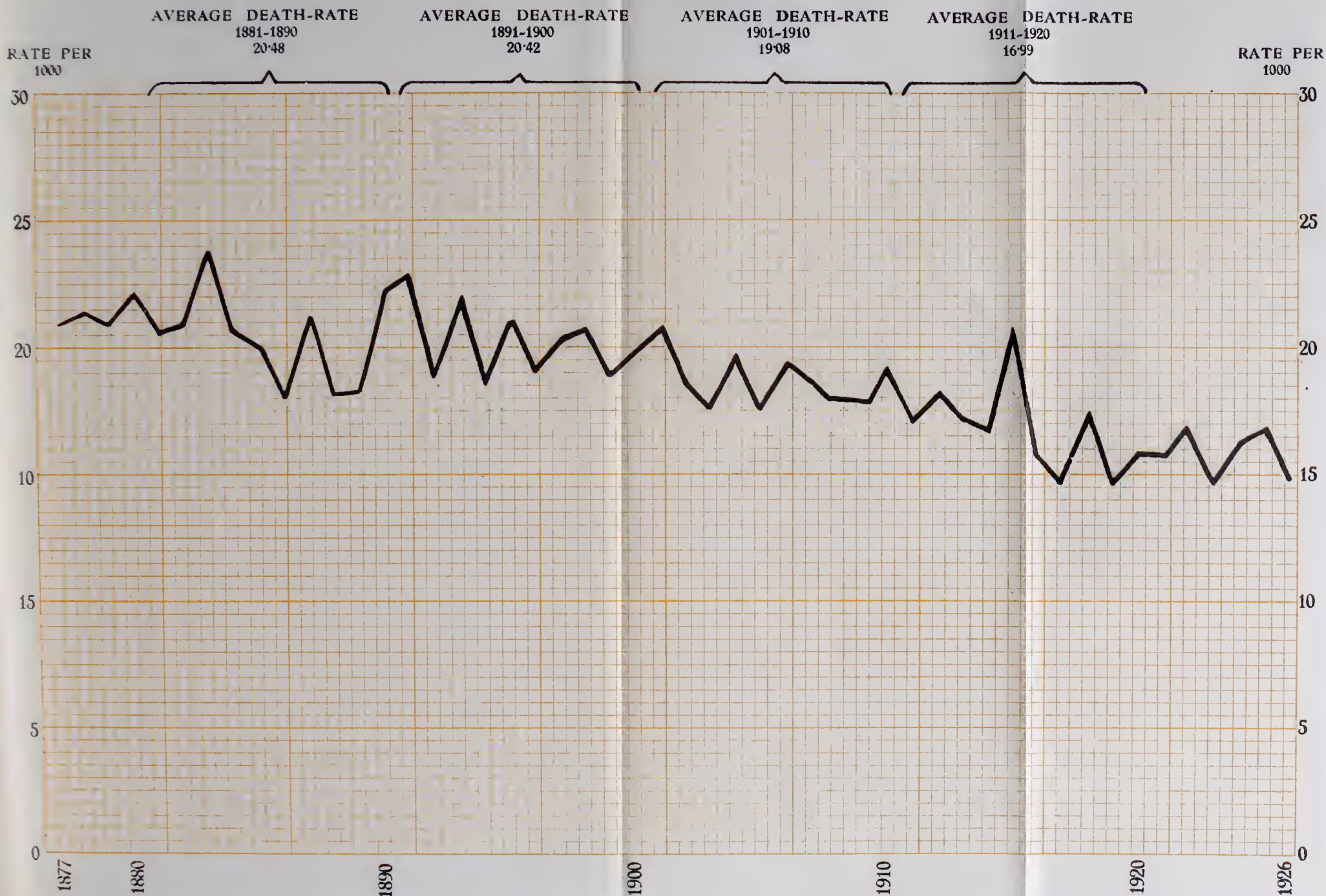
CITY OF DUNDEE

1

DEATH RATE per 1000 Population

(at all ages and from all causes)

1877-1926



DEATH RATE

(at all ages)

1891-1900

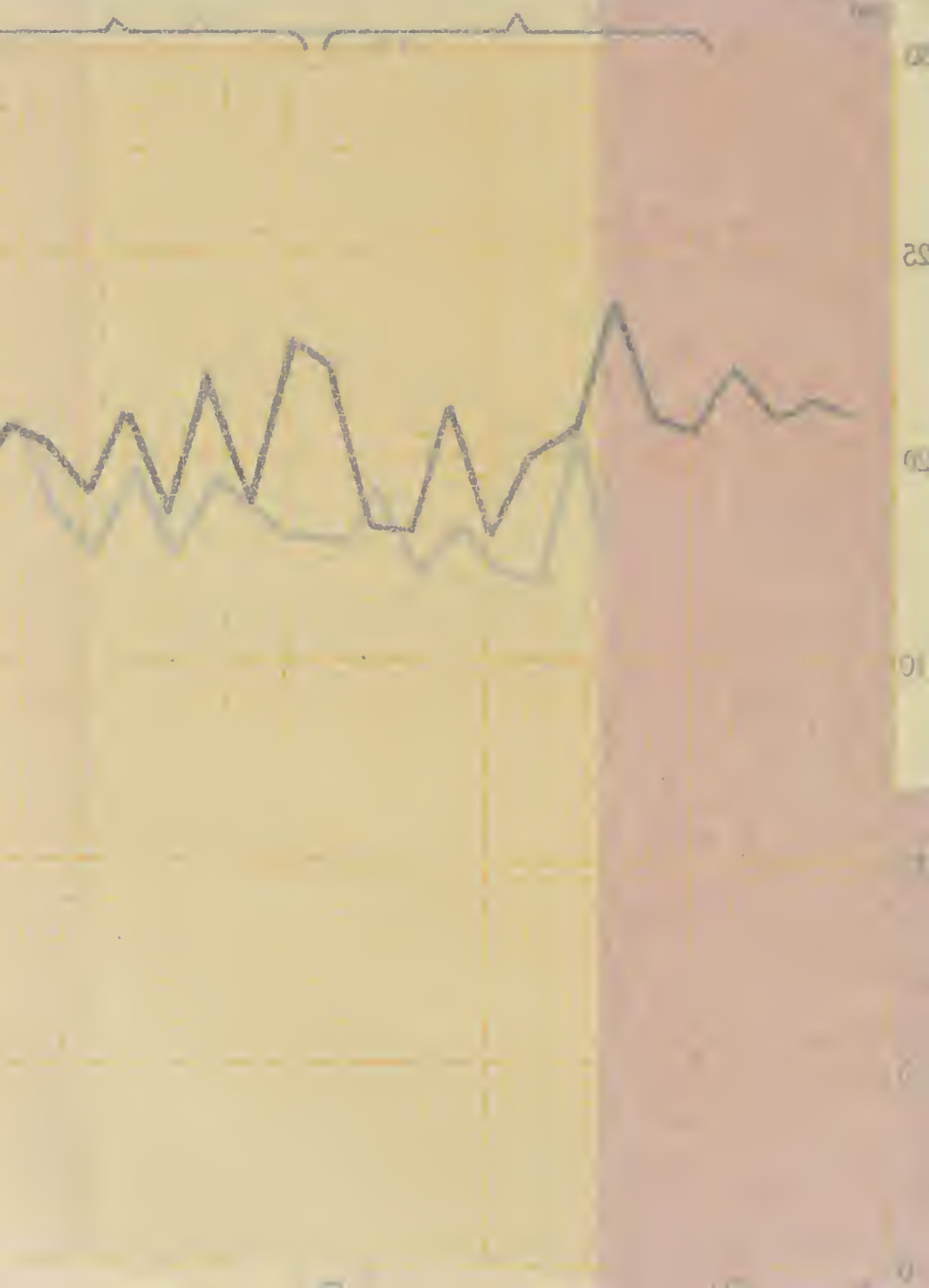
AVERAGE DEATH-RATE

1891-1900

1891-1900

20.48

1891-1900



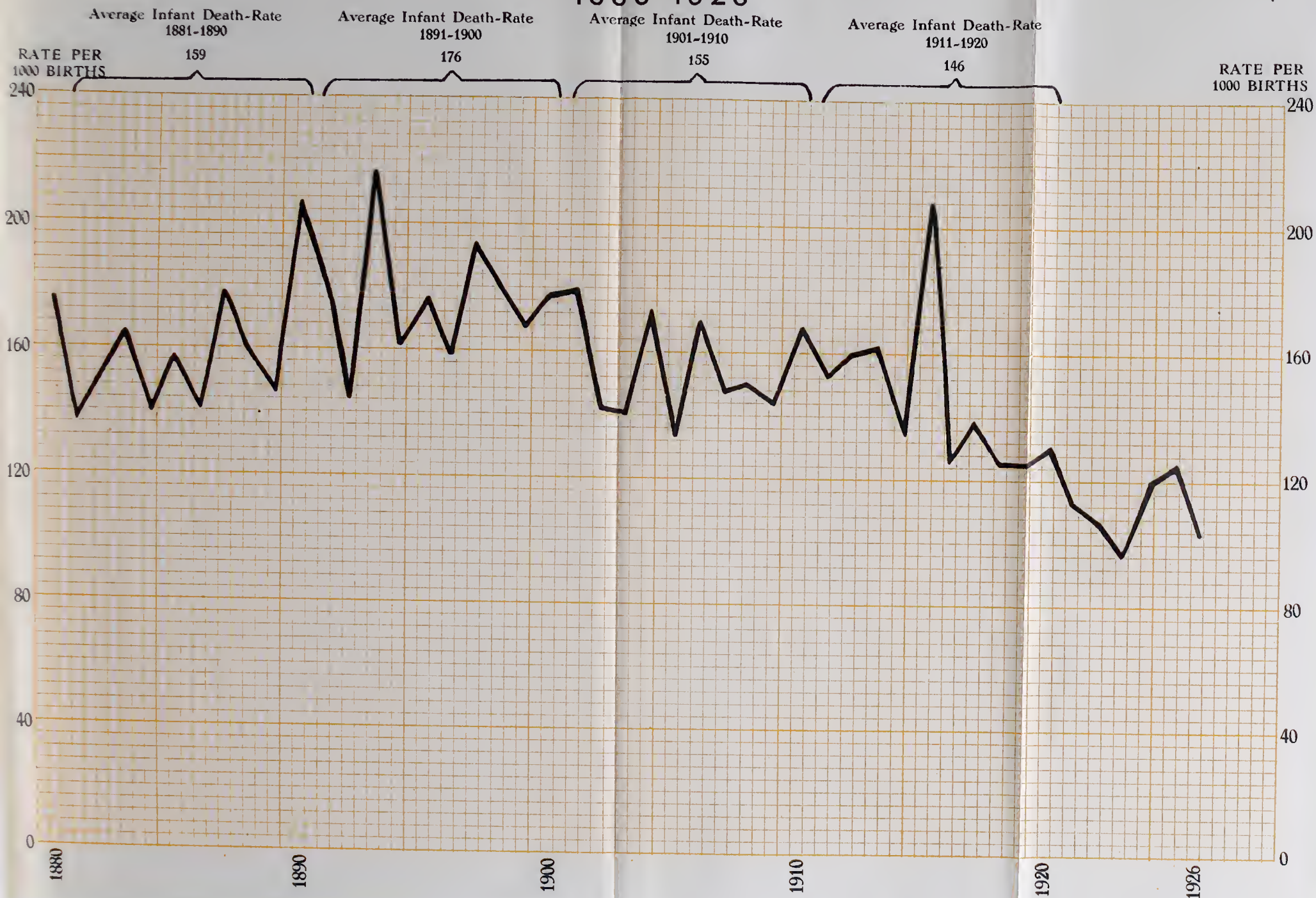
CITY OF DUNDEE

2

INFANT MORTALITY

INFANT DEATHS (under 1 Year) PER 1000 BIRTHS

1880-1926



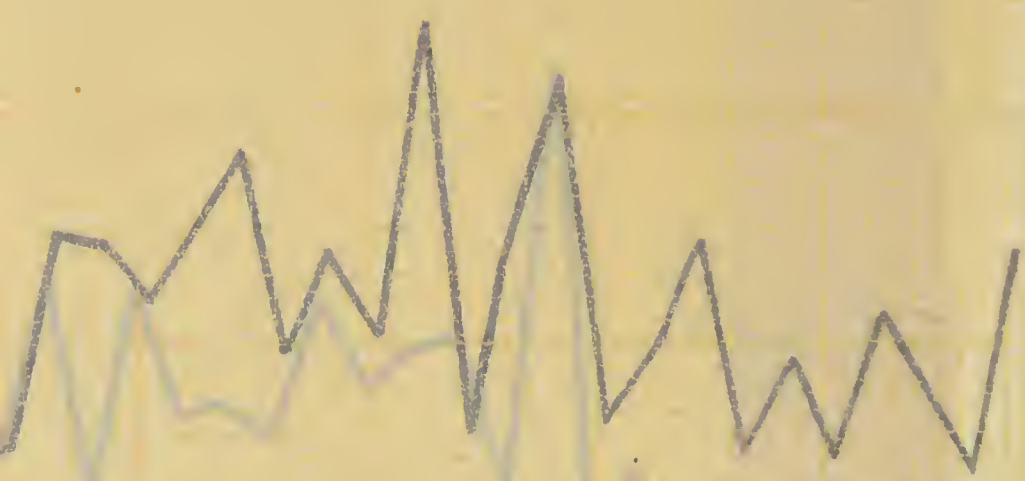
INFANT

INFANT DEATHS (and

1891

Average Infant Death Rate 1881-1900

PER BIRTH



1891

1891

1891

CITY OF DUNDEE

3

PULMONARY TUBERCULOSIS

DEATH RATE per 1000 Population

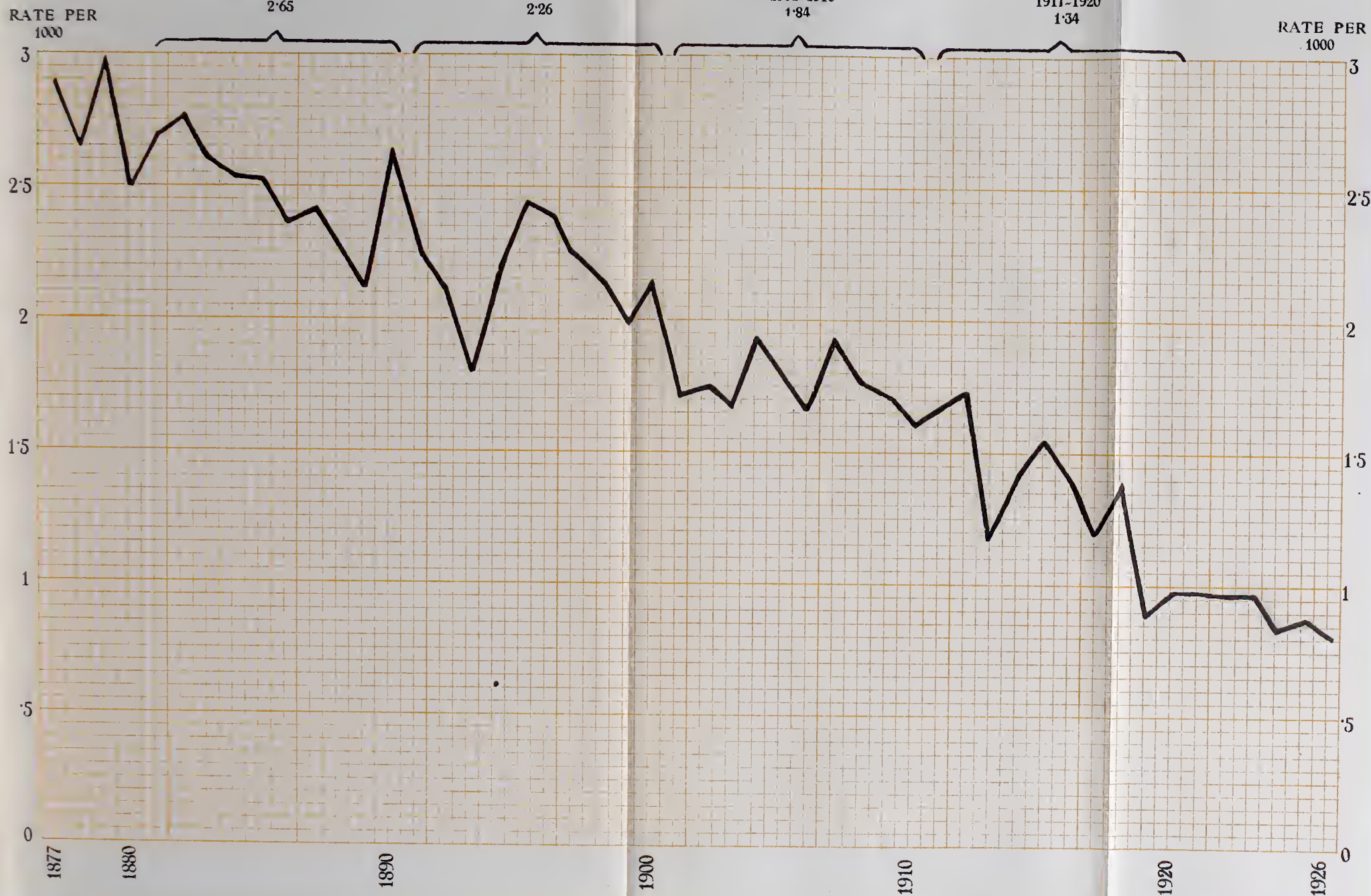
1877-1926

AVERAGE DEATH-RATE
1881-1890
2.65

AVERAGE DEATH-RATE
1891-1900
2.26

AVERAGE DEATH-RATE
1901-1910
1.84

AVERAGE DEATH-RATE
1911-1920
1.34



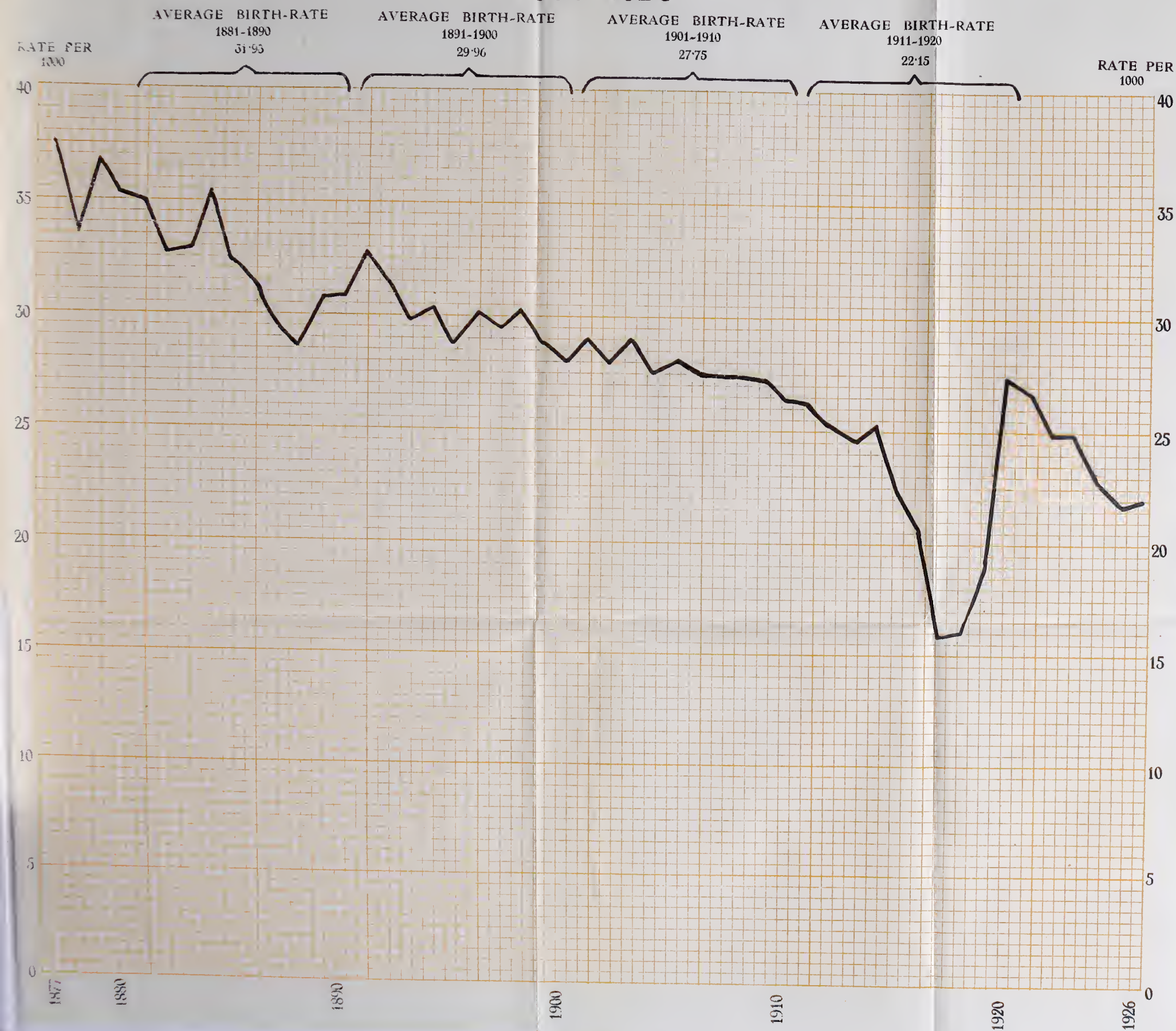
AVERAGE DEATH-RATE	1961-1962
	1.67
AVERAGE DEATH-RATE	1961-1962
	1.58

CITY OF DUNDEE

4

BIRTH RATE per 1000 Population

1877-1926



14

225

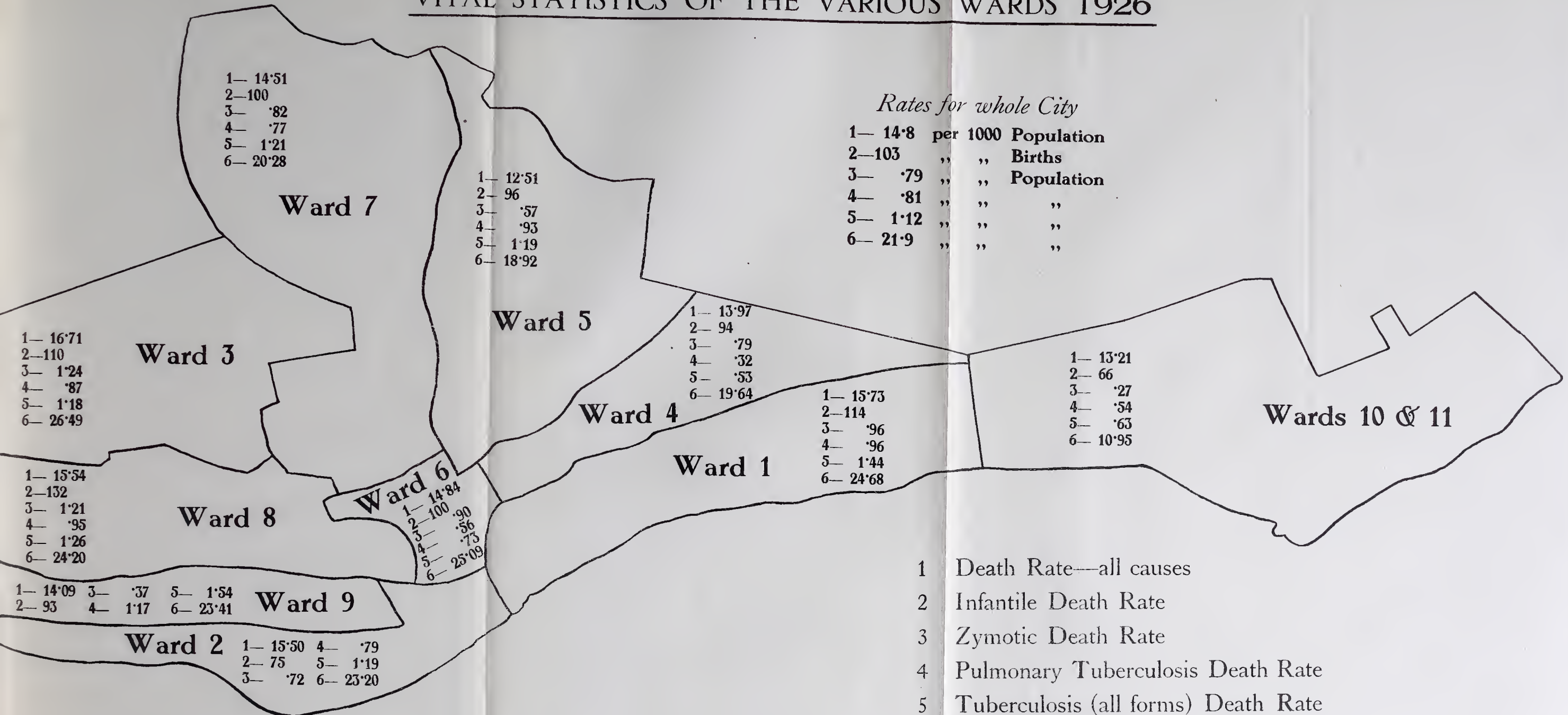
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CITY OF DUNDEE

5

VITAL STATISTICS OF THE VARIOUS WARDS 1926



Tuberculosis.

Dr. Hunter's Report.

During the year 1926 there has been no change in the Anti-Tuberculosis campaign, work having been carried out on the established lines with gratifying results. The relations with the other Authorities concerned in the work, such as the Education Authority, Parish Council, Ministry of Pensions, Royal Infirmary, etc., have been cordial, and the co-operation well maintained.

To the staffs of the Dispensary, King's Cross Hospital, Ashludie Sanatorium, and the other branches of the Public Health Department, I here tender my appreciation of their helpful services, which have been of great value in the furtherance of our scheme.

The new Public Health Institute is now in course of erection, and it is hoped that the new premises will be completed and available for occupation early next year.

In November the Nursing Staff of the Dispensary was increased by the appointment of Miss A. H. Crockett. This increase in the Nursing Staff was necessary to meet the great increase in the work of this Institution consequent to the establishment of the " Artificial Sun-ray " clinics.

During the summer months of this year a detailed survey of the notified cases of Tuberculosis in this area was made, a temporary clerkess being employed while this was carried out. It was found, during this investigation, that a considerable number of old cases could be regarded as cured and their names removed from the Register, as they were considered not to be suffering from active Tuberculosis and were not a source of danger to others. The greater proportion of these cases was of the non-pulmonary type, but there was a considerable proportion of the pulmonary type. As each individual case has to be inquired into, the investigation is still being carefully carried out, and it is hoped that the final survey may reduce considerably the number of cases on the Register.

In November, an application was received from the Hon. Secretary of the Scottish Association for Mental Welfare (Dundee Branch), requesting the use of a room at the Municipal Dispensary in Tally Street for the purpose of holding an Out-Patient Clinic for Mental Defectives. This request was granted, and the clinic is now open, sessions being held one afternoon per month.

In the year 1926, 431 cases of Tuberculosis were notified, 308 cases of Pulmonary Tuberculosis, and 123 cases of Non-Pulmonary Tuberculosis. Of these—

130 cases were discovered at the Dispensary.

160 cases were notified by private practitioners.

16 cases were notified by the School Medical Officer.

4 cases were notified from Eastern Hospital.

70 notifications came from Royal Infirmary.

5 notifications came from the Convalescent Home.

4 notifications came from medical officers outside the city.

42 cases came under notice of the Department through the Registrar after death had taken place.

Pulmonary Tuberculosis.

During the year, 308 cases of pulmonary tuberculosis were notified. The ages and sex of these were as follows :—

Age.		Males.	Females.	Total.
Under 1 year	...	1	0	1
1- 5 years	...	0	2	2
5-15	„ ...	31	38	69
15-25	„ ...	32	38	70
25-45	„ ...	46	62	108
45-65	„ ...	22	30	52
65 years and upwards...		3	3	6
Total ...		135	173	308

The following are the particulars as regards housing :—

No. of rooms.	No. of cases.	Total No. of Inmates.	No. of Inmates. per room.
1	... 52	196	3.76
2	... 175	859	2.45
3	... 42	270	2.14
4 and upwards	... 21	129	1.53

15 cases home conditions were satisfactory.

1 case lived in Eastern Hospital.

1 case lived in Salvation Army Home.

1 case lived in a nursing home.

212 houses were disinfected on removal of patients and at time of death as compared with 225 in 1925.

Non-Pulmonary Tuberculosis.

During the year, 123 cases of non-pulmonary tuberculosis were notified. The ages and sex of these were as follows :—

Age.	Males.	Females.	Total.
Under 1 year ...	3	4	7
1- 5 years ...	18	12	30
5-15 „ ...	15	26	41
15-25 „ ...	13	10	23
25-45 „ ...	6	6	12
45-65 „ ...	4	3	7
65 years and upwards...	1	2	3
Total ...	60	63	123

The sites of the disease were as follows :—

	Under 1 year.		1-5 years.		5-15 years.		15-25 years.		25-45 years.		45-65 years.		65 years & upwards.		T'l.
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	
Meningitis	3	1	4	6	1	3	0	0	1	0	0	0	0	0	9 10
Abdomen	0	1	2	2	3	5	1	0	3	0	0	0	0	0	9 8
Glands	0	1	4	3	3	11	2	4	1	1	0	0	0	1	10 21
Joints	0	0	5	1	4	4	3	2	0	0	1	0	0	1	13 8
Spine	0	0	1	0	0	0	3	2	0	1	2	0	0	0	6 3
Other Forms	0	1	2	0	4	3	4	2	1	4	1	3	1	0	13 13
Totals	3	4	18	12	15	26	13	10	6	6	4	3	1	2	60 63

The following are the particulars as regards the housing of the non-pulmonary cases :—

No. of rooms.	No. of cases.	Total No. of Inmates.	No. of Inmates. per room.
1	... 17	65	3.82
2	... 62	317	2.55
3	... 13	75	1.92
4 and upwards	... 8	50	1.56

21 cases, home conditions were satisfactory.

1 case lived in a nursing home.

1 case lived in the Salvation Army Home.

There is an increase of 30 in the number of cases of Tuberculosis notified during the past year, and this increase is practically entirely of Pulmonary cases, an increase of 29 Pulmonary cases and 1 Non-Pulmonary case. Further analysis of figures in the Pulmonary cases reveals this increase

to be 12 males and 17 females, and in the various age groups the greatest increase in the males is above age 15 and in the females below age 15. It is difficult to account for this increase. In studying the notification rate of the past 14 years, it would seem that the disease progresses by waves, each wave crest being succeeded by a two years gradual fall—it may be that we are on the crest of the wave now. The height of the crest has lowered greatly, the last highest point—in 1922—being 401, and this year's crest 308.

Tuberculosis Dispensary.

During the year 739 new cases were enrolled as compared with 615 in the year 1925. Of these, 165 were found to be suffering from distinct Phthisis (68 males and 97 females). 173 were found not to have the disease. In 390 cases the signs were somewhat indefinite; but these cases were regarded as the Pre-tuberculosis stage; 8 cases were found to be suffering from other forms of tuberculosis, and 3 were not examined.

There were 156 contacts examined; 10 of these were found to be suffering from pulmonary tuberculosis, and 1 was found to be suffering from non-pulmonary tuberculosis, 68 were suspicious and are being kept under observation, and the remaining 77 were found to be negative.

Of the 165 cases of definite Phthisis, 73 were previously notified, and 92 were notified from the Dispensary for the first time.

The ages and sex of these were as follows:—

Age.		Males.	Females.	Total.
Under 1 year	...	0	1	1
1- 5 years	...	2	3	5
5-15 „	...	15	24	39
15-25 „	...	23	20	43
25-45 „	...	20	35	55
45-65 years	...	8	14	22
65 years and upwards...		0	0	0
		—	—	—
Total	...	68	97	165

The attendances at the Dispensary were as follows :—

	Insured.	Non-Insured.	Total.
January	767	836	1,603
February	837	1,057	1,894
March	920	1,308	2,228
April	838	1,199	2,037
May	768	1,184	1,952
June	842	1,192	2,034
July	662	782	1,444
August	794	938	1,732
September	820	1,214	2,034
October	746	1,174	1,920
November	871	1,368	2,239
December	833	1,096	1,929
	9,698	13,348	23,046

Artificial Sunlight.

During 1926, 123 patients attended the Artificial Sunlight Clinic. Of these 63 were males and 60 were females.

	Males.	Females.	Total.
No. of Attendances ...	1,077	1,440	2,517
No. of Sessions ... 137			

The cases enrolled and the Dispensary attendances show a marked increase, and again this increase is amongst the children.

The contact examination shows an increase, but sufficient advantage is not taken of this very important safeguard.

The " Artificial Sun Ray " clinic began to function on 20th January, and has proved of the greatest value. At first the clinics were held weekly, as the Staff could not be spared longer from their work in the district. On the appointment of an extra nurse, in November, one of the nurses was appointed to supervise the clinics, and since then the clinics have been held daily and greater variety of cases treated.

The results obtained have been very good. Of the type of cases treated, the Pre-tuberculous child predominates, and in this type the results have been most striking. In a few weeks a listless child, off food and sleep, has been transformed into a happy, active, normal being, eating well and sleeping quietly. As a preventive, I consider this measure

to be of extreme importance. Of other types, enlarged glands, with and without discharging sinuses, superficial ulcers, cases of asthma, and abdominal tuberculosis, have shown marked, but less spectacular, improvement. In bone, joint and spine disease, improvement has taken place, but here the progress is very slow. The general condition has shown marked benefit, but the effect on the diseased sites has not been so definite.

Pulmonary tuberculosis is in a different category, and I prefer that these cases should be under the closer supervision of a Residential Institution, as the Sanatorium or Hospital.

Laboratory Work.

During the year 505 Specimens of Sputum were examined, with the following results :—

		Positive.	Negative.
97 for General Practitioners	...	21	76
408 for Dispensary Patients	...	77	331

Ashludie Sanatorium.

During the year there were 117 cases admitted to this Institution. Of these 52 were males and 65 were females. 119 patients were discharged (53 males and 66 females). Average stay in Institution—199 days.

The following show the result of the treatment of these cases :—

		Very much Improved.	Improved.	Slight Improvement.	No Change.
Males	...	25	11	3	11
Females	...	20	19	5	19

3 males and 3 females died before discharge. 91 are still alive, and 22 have died since discharge.

The work at Ashludie Sanatorium has been carried on most satisfactorily, and the results obtained have been good.

An " Artificial Sun Ray " treatment apparatus was installed during the year, and suitable cases were treated under close supervision. Good results have been obtained in some cases.

The treatment by Artificial Pneumothorax, after much consideration, has been adopted. To carry out this treatment X-ray assistance is essential, and the absence of this apparatus has delayed the adoption of this very useful form of treatment. At present it is carried out in a small number of cases and has given very good results, but the handicap lacking the aid from the X-ray limits greatly the use of this method of treating obstinate cases. I would strongly urge the addition of this equipment to Ashludie and the laying of a direct supply of electricity from the city, in order that this installation could be effected.

Plans are being considered for increased accommodation here, making the need for these more imperative.

. King's Cross Hospital.

During the year there were 114 cases admitted to this Institution. Of these 56 were males and 58 were females. 49 patients died (25 males and 24 females) and 63 were discharged, many of these greatly improved.

The ages and sex of the fatal cases were :—

Age.			Males.	Females.
Under 1 year	..	...	0	0
1 -5 years	...	...	0	0
5-15 „	...	...	2	4
15-25 „	...	...	4	7
25-45 „	...	...	14	9
45-65 „	...	...	5	4
Over 65 years	...	...	0	0
			25	24

The work at King's Cross Hospital has been carried out most satisfactorily. The pressure on the accommodation has been very great, and the waiting period before admission has been longer than ever before. Extra beds are required to meet the urgent needs of the adult non-pulmonary case for whom there is no provision, and it is this type of case that reduces the number of beds available for the pulmonary case. The pavilions to be erected at Ashludie do not provide any additional beds; it is only a transference of 60 beds from King's Cross to Ashludie. It is hoped that beds may still be provided at King's Cross for suitable cases, to meet this ever growing urgent need.

An "Artificial Sun Ray" apparatus was installed in King's Cross during the year, and many cases have been benefited thereby. It is used mainly for the non-pulmonary cases, but has been used to advantage in special complications in pulmonary cases under strict supervision.

Sidlaw Sanatorium, Auchterhouse.

During the year there were altogether 32 cases from the city under treatment in this Institution. 18 of these were males and 14 were females. There were 37 cases discharged (24 male and 13 females). Average stay in Sanatorium—160 days.

The following table shows the result of the treatment in these cases :—

Improved.	Slight Improvement.	No Improvement.
23	9	5

A new agreement has been entered into between the Corporation and Directors of the Royal Infirmary, taking effect on completion of alterations at Sidlaw Sanatorium. The number of beds available has been increased, and the age of admission extended from 4 years to 13 years, and older cases under special circumstances under arrangements with the Medical Superintendent.

This extra accommodation will help to meet a crying need in the city, that of treatment for the child of school age, but there is still the toddler and the infant, who is not yet reached and who is as urgently in need of treatment as any of the others.

I would here record my highest appreciation of the courtesy and helpful services of the Visiting and Residential Staffs.

Child Welfare Scheme.

Dr. Margaret Scott Dickson's Report

ALSO REPORTS BY

Dr. H. Gordon Campbell

Dr. Margaret Fairlie and

Dr. Annie A. Fulton

MATERNITY AND CHILD WELFARE SCHEME.

HOME VISITING.—The Staff of Health Visitors has not been increased, consisting of 1 Superintendent and 10 ordinary Health Visitors; and the usual visits to the newly-born babies and to all special cases of infectious diseases have been carried out by them as in former years.

CLINICS.—A very noteworthy fact as regards the attendances at the ordinary Clinics this year is the enormous increase in the number of attendances made. In 1925 the total attendances at the 5 ordinary Clinics and Broughty Ferry numbered 15,907, while in the past year they have totalled 26,308, an increase of 10,401. The increase is most marked in Blackness Clinic, where the numbers have been more than doubled; and in the small premises at present in use it has been found quite impossible to deal with the work in one session, so a morning session of $2\frac{1}{2}$ hours was commenced in October. With this additional session there are now 7 weekly sessions of the ordinary Clinics, each lasting $2\frac{1}{2}$ hours, with 2 hours weekly for the attendance of Mothers only, and the weekly weighing Centre in Broughty Ferry with attendance of the Medical Officer once a month.

SPECIAL CLINICS.—There have been no changes in the Dental, Ante-natal, or Venereal Diseases Clinics, and the reports of the special Medical Officers of these Clinics are appended. Special efforts have been made to treat the cases of incipient Rickets in Infants, and the Clinical Rickets in children, by Ultra-Violet Radiation. A "K.B.B." Mercury Vapour lamp was installed in the Central Clinic at 94a Victoria Road in February, and it is in operation every morning for 2-3 hours in charge of a Health Visitor. Unfortunately the only room available for this purpose is a very small one only accomodating 5 or 6 children at one time: and this has limited the extent to which the treatment

could be employed. It is our aim, however, when the extended premises, now under construction are completed, that every child attending the Clinics who does not make satisfactory progress will have an opportunity of receiving treatment. The patients have been referred from the various Clinics by the Medical Officer in charge, and have been periodically examined and their progress noted.

133 cases have been sent for treatment, comprising :—

23 infants from 2 months to 1 year of age,

109 children from 1 to 5 years, and

1 expectant mother.

The cases of infants were suffering from marasmus or showed signs of incipient rickets, and the older children were either cases of clinical rickets or were not thriving. In all the cases in which treatment has been continued for a sufficiently long period to show definite results, there has been marked improvement.

DAY NURSERIES.—The 4 Day Nurseries have been open during all the Factory working days, with the exception of Isles Lane Day Nursery, which had to be closed for six weeks, first on account of a number of cases of diphtheria among the children and then on account of scarlet fever in the Staff. This has caused a decrease in the total attendances as compared with last year, but had it not been for this circumstance, the attendances would have been equal to those of last year, or might possibly have exceeded them.

The receipts have been reduced proportionately, being £690 16s. 2d. as compared with £717 6s. taken in 1925.

The charge remains unaltered—namely, 4s. per week of 5 days for each child, with an extra charge of 6d. for Saturdays, and a slight reduction when more than one member of the same family attend simultaneously.

REPORT OF CASES ADMITTED TO THE CLINICS.

CLINIC	Babies			Children—1 to 5 Years						Mothers						Total Atten- dance for 1925	
	Total			Total			Total			Total			Total Atten- dance.	P.N.	A.N.		O.C.
	N.C.	O.C.	Atten- dance.	N.C.	O.C.	Atten- dance.	N.C.	O.C.	Atten- dance.	N.C.	O.C.	Atten- dance.					
Victoria Road	...	316	121	5484	63	212	2537	3	7	0	0	3	7	6031	4391		
Lochee	...	154	52	2100	36	148	2045	0	1	0	1	0	16	4161	2598		
Caldrum Street	...	132	52	1870	14	141	1317	0	4	0	1	0	8	3195	2082		
Princes Street	...	162	50	1761	39	115	1555	1	6	0	2	1	17	3334	2164		
Blackness Road	...	291	77	4838	43	233	3873	0	7	0	2	0	13	8724	3744		
Broughty Ferry	...	31	14	397	4	61	465	0	1	0	0	0	1	863	928		
Dental Clinic	...	0	0	0	36	2	44	6	20	2	12	11	80	135	165		
Ante-Natal Clinic	...	...	...	0	...	...	...	185	45	22	3	378	58	436	429		
V.D. Clinic	...	38	4	77	10	0	64	12	40	1	2	128	340	609	543		
Ultra Violet Ray Clinic	...	24	0	130	108	0	1708	0	1	0	0	0	3	1841	...		
		1148	370	14657	353	912	13608	207	132	25	23	521	543	29329	17044		
Relief Cases—1st Visits, 525. Revisits, 2982.																	
		Total			Total			Total			Total						
		...			...			...			...						
		3507			3507			3507			3507			787			
		17831			17831			17831			17831			17831			

67 babies and 29 children were admitted to the Infant Hospital, and 1 baby was admitted to King's Cross Hospital. 59 babies and 32 children died, and 2 babies and 10 children, who had been attending the Clinics, left town.

Statistics as to weight of babies on admission to the 5 principal Centres with reference to feeding :—

	Av. (1)	—(2)	+(3)	Not Weighed.	Total.
Breast-fed - - -	40 (5.4%)	157 (22%)	514 (72%)	2 (0.2%)	713
Partly breast-fed - - (for a few months)	0 —	12 (42.8%)	16 (57%)	0 —	28
Mixed feeding - - -	4 (5.1%)	28 (35.9%)	46 (58.9%)	0 —	78
Fresh cow's milk - -	9 (5.6%)	78 (48.7%)	72 (45%)	1 (0.6%)	160
Dried milk or artificial food - - - - -	4 (5.2%)	47 (61.8%)	25 (32.8%)	0 —	76
	57 (5.4%)	322 (30.5%)	673 (63.7%)	3 (0.3%)	1,055

(1) Av. = Average weight for age.

(2) — = Under average weight for age.

(3) + = Over average weight for age.

Health of Babies on Admission.—42 babies (4 per cent.) showed no disease or defect. The remaining 1,013 showed a total of 2,853 diseases or defects classified as follows :—

Diseases of digestive system	1,324
Diseases of respiratory system	398
Diseases of nervous system	4
Diseases of nutrition :—	
(1) Rickets	6
(2) Marasmus	9
(3) Anæmia	3
(4) Congenital syphilis	13
	— 31
Diseases of the skin	342
Diseases of the eye	44
Diseases of the ear, nose, and throat	17
Surgical diseases	28
Congenital defects	600
Various	65
	—
	2,853

Statistics showing relation of feeding to special diseases of nutrition :—

	No Disease	Rickets	Mar- asmus	Anæmia	Digestive Diseases	Other Diseases	Total
Breast Fed ...	29 4%	4 0·5%	2 0·5%	1 0·1%	54·5 76·4%	132 18·5%	713
Partly Breast Fed (for a few months)	2 7·1%	0 ...	0 ...	0 ...	14 50%	12 42·8%	28
Mixed Feeding ...	4 5·1%	0 ...	0 ...	0 ...	63 80·7%	11 14·1%	78
Fresh Cow's Milk	4 2·5%	0 ...	5 3·1%	1 0·6%	119 74·3%	31 19·3%	160
Dried Milk or Artificial Food	3 3·9%	2 2·6%	2 2·6%	0 ...	60 78·9%	9 11·8%	76
Totals	42 3·9%	6 0·4%	9 0·8%	2 0·1%	801 75·9%	195 18·4%	1055

Children 1·5 Years.

102 Males and 93 Females were admitted, of which 4 Males and 3 Females showed no disease or defect.

The remaining 88 Males and 90 Females showed respectively 283 and 228 diseases or defects classified as follows :—

	Male.	Female.	Total.
Diseases of digestive system ...	18	15	33
Diseases of respiratory system...	46	43	89
Diseases of nervous system ...	6	3	9
Diseases of nutrition :—			
Rickets ...	57	42	99
Marasmus ...	2	6	8
Anæmia ...	0	1	1
Debility ...	5	11	16
Diseases of the skin ...	20	17	37
Diseases of the eye ...	6	11	17
Diseases of the ear, nose and throat :—			
Adenoids ...	20	14	34
Enlarged tonsils ...	16	15	31
Various ...	10	6	16
Surgical diseases ...	31	31	62
Infectious diseases :—			
Influenza ...	1	0	1
Chicken pox ...	0	1	1
T.B. peritonitis ...	0	1	1
Congenital defects ...	41	4	45
Intestinal parasites ...	0	1	1
Advanced dental caries ...	2	3	5
Various ...	2	3	5
	283	228	511

ANALYSIS OF CASES.

Consultations for Mothers :—

1. Ante-Natal	2
Advice only (no disease)	1
Conditions due to pregnancy	1

2. Post-Natal.

25 Mothers were treated for 30 diseases classified as follows :—

Anæmia	5
Debility	5
Mastitis	6
Cracked nipple	1
Other surgical conditions	2
Diseases of digestive system	5
Diseases of the skin	3
Neuralgic Headaches	1
Subacute rheumatism	1
Conjunctivitis	1
	—
	30

ATTENDANCES AT DAY NURSERIES.

Day Nursery	Re-admitted from 1925			New Cases Admitted			Total Attendances			Ave. Daily Attendance			No. of Days Open
	†Babies	‡Toddlers	Total	†Babies	‡Toddlers	Total	†Babies	‡Toddlers	Total	†Babies	‡Toddlers	Total	
St. George's	9	12	21	21	29	50	2654	2947	5601	9	10	19	289
Hillbank	5	7	12	24	31	55	2245	2816	5061	8	10	17.5	289
Isles' Lane	7	5	12	17	15	32	1555	1385	2940	6	6	12	245
Lilybank	7	12	19	16	11	27	2220	2724	4944	8	9	17	288
Totals	28	36	64	78	86	164	8674	9872	18546	31	35.5	67	average 278

† Under 2 Years.

‡ 2-5 years.

PROVISION OF FREE FOOD FOR NECESSITOUS CASES.

	Sold at Cost Price	GIVEN FREE				Number of		Total Amount	
		New Cases		Old Cases		Orders Given		Given	
		*C.	*RC.	C.	R.C.	C.	R.C.	C.	R.C.
Dairy Milk ...	...	11	348	68	193	708	2762	38,550	144,331
Glaxo ...	1215lbs.	...	1	...	1	0	15	0	122
Pres. Glaxo...	140 tins	2	1	0	1	6	12	22	68
Benger's Food	1 „	3	0	0	1	3	1	3	1
Allen & Hanbury's	35 „	2	0	0	1	4	1	18	3
Horlick's Malted Milk	3 „	1	...	0	...	4	0	9	0
Virol ...	556 „	6	...	1	...	11	0	27	0
Virolax ...	165 „	2	...	2	...	17	0	55	0
Dinners ...	...	0	47	1	24	3	186	75	4075

* C.—Given on medical grounds only to necessitous mothers and children attending the Clinics regularly.

† R.C.—Granted by Relief Committee to mothers unable to attend the Clinics and given only on account of necessitous circumstances.

Total Cost of Food Supplied Free.			
Dinners - - -	£155	12	6
Milk - - -	2,354	0	6
Other Food - -	27	4	3
	£2,536 17 3		

Amount received for Dried Milk, etc., Sold at the Clinics at cost price.			
Glaxo - - -	£91	2	6
Pres. Glaxo - -	14	0	0
Benger's Food -	0	3	4
Allen & Hanbury's	5	3	6
Horlick's Malted Milk - - -	0	8	6
Virol - - -	27	16	0
Virolax - - -	6	17	10
	£145 11 8		

School for Mothers.

Sewing Classes for Mothers were conducted in connection with three of the Clinics by members of the Dundee Voluntary Health Workers Association. Miss Cullen, Warden of Grey Lodge has very kindly continued the favour granted by Miss Batting the former Warden of permission to use the Club Room for Princes Street Clinic Class. The Department takes this opportunity of thanking Miss Cullen for her kindness.

The report of the work done is as follows :—

Total number of classes held	...	...	...	69
Duration of each class	...	...	...	2 hours
Total number on register	...	...	...	128
Approximate number of garments made	...	...	...	240

Social Work.

The Department again wishes to express gratitude to all the members of the Dundee Voluntary Health Workers Association who have aided the work, either by assisting at the Clinics or Sewing Classes, visiting the Day Nurseries or making garments for children.

During the year 315 sewed and 570 knitted garments were made for the Clinics, and 278 garments were supplied to the Day Nurseries. In addition 24 garments were supplied to the Day Nurseries through the kindness of a friend.

The garments distributed at the Clinics numbered 991. Of these :—

- 245 were sold at cost price.
- 114 were sold at one-half cost price.
- 585 were sold at one-quarter cost price.
- 47 were given free to necessitous cases.

991

On January 16th 500 mothers attending the Clinics were entertained to tea in the Y.M.C.A. Hall; several members of the Public Health Committee being present. After tea two Cinematograph Films on the " Care of the Teeth " were shewn in which the mothers appeared to be much interested.

Particulars of Births Notified and Registered in Dundee during 1926.

Number of births taken from Registrars' Weekly Returns (includes transfers out and also transfers in)	3,853
Less : Number transferred into Dundee	29
(1) Number of Live Births occurring in Dundee	3,824
Number of Stillbirths	178
(2) Total number of births occurring in Dundee	4,002
(3) Number of births notified in accordance with the Act— <i>i.e.</i> 93% of total number of births (4002)	3,723
(4) Number of live births notified— <i>i.e.</i> 92.7% of live births (3,824)	3,545

Classification of Notifications.

By whom Notified.	Notified.	Unnotified.	Total.	Total cases attended.	Percentage of total births.
Doctors	546	190	736	1,050	26.29%
Doctor and Midwife	87	0	87	143	3.5%
Midwives	1,514	6	1,520	1,470	37.29%
Mat. Ward D.R.I.	1,244	49	1,293	1,295	32.3%
E.P. Hospital ...	18	5	23	23	0.5%
Handywomen ...	1	0	1	2	0.5%
Parents	155	0	155	—	—
Other Sources ...	158	0	158	—	—
Born out of town ...	—	29	29	—	—
	3,723	279	4,002	3,983	

OPHTHALMIA NEONATORUM.

	Doctors	Midwives	Maternity Ward		Handy Women	Doctor and Midwife	C. W. Dept.	Eye Institution	Eastern Poorhouse Hospital	Total
			In-Pat.	Out-Pat.						
By whom notified...	18	16	4	2	0	9	11	3	1	64
By whom attended	15	31	8	7	0	2	0	0	1	64
Total No. of Births attended in 1926	1050	1470	1295		2	143	—	—	23	3983

Admitted to Hospital	Treated at Home	Type of Case		Result		Home Visits by Health Visitors		
		Severe	Mild	Complete Recovery	Injury to Eye	Initial Visits	Not Seen	Re-visits
4 2 in Hosp.	58	9	55	64	—	62	2	993

9 Cases of the severe type were attended at Birth as follows :—

5 Doctors.

2 Maternity Out-Patients.

1 Midwife.

1 Doctor and Midwife.

4 Cases of the severe type were admitted to King's Cross Hospital,

Puerperal Sepsis.

15 Cases of Puerperal Sepsis came under the notice of the Maternity & Child Welfare Department :—

9 Died.

6 Recovered.

PUERPERAL SEPSIS—15 CASES.

Attendance at Birth	Notified	Un-notified	Primiparae	Multiparae	Admitted to Hospital	Admitted to Nursing Home	Nursed at Home	Recovered	Died	Total	Total Number of Births attended in 1926
Doctors	5	...	3	2	3	1	1	3	2	5	105
Doctor and Midwife	0	...	...	...	...	...	...	...	...	0	143
Midwives	2	...	1	1	2	...	...	1	1	2	1470
Maternity Ward—											
Inpatient	4	1	1	4	5	...	...	1	4	5	} 1295
Outpatient	3	...	1	2	3	...	...	1	2	3	
								(Died 1927)			
East Poorhouse											
Hospital	0	...	...	...	...	...	...	...	...	0	23
Handywomen ...	0	...	...	...	...	...	...	...	...	0	2
Totals	14	1	6	9	13	1	1	6	9	15	3983

PARTICULARS OF CASES.

	Died.	Recovered.	Total.
Normal Labour	3	2	5
Ruptured perineum	1	0	1
Instrumental Delivery with Ruptured Perineum and slight Hydramnios ...	1	0	1
Instrumental Delivery	1	1*	2
Breech Ruptured Perineum	1	0	1
Ruptured Perineum with Vaginal Laceration	0	1	1
Retained Placenta	1	0	1
Frayed Membranes	1	0	1
Retained Placenta Collapse from Hæmorrhage	1	0	1
Not Visited	0	1	1

* Died in 1927.

				RECOVERED.		DIED.	
				Primipara.	Multipara.	Primipara.	Multipara.
Where delivered :—							
Home	...	...	3	2	2	3	
Maternity Ward	...	...	0	1	1	3	
Nursing Home	...	...	0	0	0	0	

Where Treated :—

Home	...	...	1	0	0	2	
Maternity Ward	...	...	2	3	3	4	
Nursing Home	...	...	0	0	0	0	

Home Conditions :—

Good	...	...	3	2	1	4	
Bad	...	...	1	0	2	2	

Infant Death Statistics, 1926.

152 deaths occurred in children over one year and under 5 years of age. 386 deaths occurred in children under one year distributed as follows :—

1st week	2nd week	3rd week	4th week	1-3 months	3-6 months	6-9 months	9-12 months	Total
130	32	8	20	55	78	37	26	386

Of these 120 were breast fed.

136 were artificially fed.

22 were partly breast fed (mixed feeding).

In 75 cases feeding was not commenced owing to prematurity.

32 cases were not visited.

1 case no particulars were obtained.

Regarding the feeding, the ages at which those infants died were as follows :—

		1st month	2nd month	3rd month	4th month	5th month	6th month	7th month	8th month	9-12 months	Total	Feeding not commenced	N.V.	N.P.
Breast	..	71	8	3	9	13	1	2	0	13	120	75	32	1
Mixed	..	1	5	4	3	1	2	3	1	2	22	..	..	..
Artificial	..	18	19	14	21	15	11	11	6	21	136	..	..	..
Totals	..	90	32	21	33	29	14	16	7	36	278	75	32	1

HOUSING.

In the 353 deaths in which particulars were obtained :—

- 126 occurred in houses of one room, in which there were 457 occupants.
- 192 occurred in houses of two rooms, in which there were 978 occupants.
- 29 occurred in houses of three rooms in which there were 191 occupants.
- 5 occurred in houses of four rooms, in which there were 34 occupants.
- 1 occurred in an institution.

FAMILY HISTORY.

The family history showed that in these families 711 children were still alive but 637 had died and of these no fewer than 541 had died in the first year of life.

In the 353 cases in which particulars were obtained 174 mothers were engaged in work outside their own homes 179 were not thus engaged.

In 24 cases the mothers left work one week or under before confinement.

In 2 cases the mothers left work two weeks before confinement.

In 6 cases the mothers left work three weeks before confinement.

In 2 cases the mothers left work four weeks before confinement.

33 children who died were illegitimate.

46 children who died were twin births.

94 deaths were due to prematurity.

Deaths from Diarrhœa.

Special inquiry into deaths due to diarrhœa :—

42 deaths occurred from diarrhœa during 1926.

13 were breast fed.

21 were artificially fed.

8 were partly breast fed (mixed feeding).

	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9-12 Month	Total
Breast ...	2	1	0	0	4	1	2	0	3	13
Mixed ...	0	3	2	0	0	0	0	1	2	8
Artificial	0	4	3	3	3	2	0	1	5	21
Totals	2	8	5	3	7	3	2	2	10	42

FAMILY HISTORY.

The family history showed that in these families 84 were still alive.

83 had died and no fewer than 69 had died in the first year of life.

19 mothers had worked during pregnancy.

23 mothers were not engaged in outside employment.

HOUSING.

Of the 42 deaths from Diarrhoea in which particulars were obtained :—

- 18 occurred in houses of one room, in which there were 71 occupants.
 20 occurred in houses of two rooms, in which there were 106 occupants.
 4 occurred in houses of three rooms, in which there were 29 occupants.

Health Visitors' Work.

Total number of Homes Visited, 24,308 :—

(a) Ordinary :—22,991.

Babies	13,740
Children, 1-5 years	9,233
Mothers, A.N.	13
Mothers, P.N.	5
	22,991

(b) Infectious Diseases and Special Visits :—1,317.

Measles—

Babies	6
Children	75

Whooping Cough—

Babies	18
Children	111

Chicken Pox—

Babies	22
Children	24

Mumps—

Babies	0
Children	1

Ophthalmia Neonatorum 1,055

Puerperal Sepsis 2

Maternal Deaths 3

1,317

Total number of cases Visited :—

(a) Ordinary :—

	1st visit.	Re-visits.	Total.
Babies	3,416	10,527	13,943
Children, 1-5 years	12	18,736	18,748
Mothers, A.N.	6	7	13
Mothers, P.N.	2	3	5
	3,436	20,273	32,709

(b) Infectious Diseases and Special Visits :—

Measles—

	1st visit.	Re-visits.	Total.
Under 1 year	5	3	8
Under 5 years	25	25	50
Over 5 years	41	15	56

Whooping Cough—

Under 1 year	17	9	26
Under 5 years	63	16	79
Over 5 years	69	7	76

Chicken Pox—

Under 1 year	11	13	24
Under 5 years	15	14	29
Over 5 years	5	4	9

Mumps—

Under 1 year	—	—	—
Under 5 years	1	—	1
Over 5 years	—	—	—

Ophthalmia Neonatorum	62	993	1,055
------------------------------	----	-----	-------

Puerperal Sepsis	2	0	2
-------------------------	---	---	---

Maternal Deaths	3	0	3
------------------------	---	---	---

	319	1,099	1,418
--	-----	-------	-------

Of the (3416) infants visited for the first time :—

156 were premature.

3,260 were full-time births.

HOUSING.

Of the (3363) homes of the newly born, visited for the first time the home conditions were as follows :—

379 very good.

1,649 good.

1,212 medium.

123 bad.

Information regarding feeding of (3416) infants visited for the first time :—

(a) Breast fed	2,816
(b) Partly breast fed	87
(c) Artificially fed	230
Stillborn	147
Dead at first visit	136

Special information as to the feeding of infants for the first six months of life was obtained in (3040) cases: the particulars were as follows :—

(a) Breast fed	1,051
(b) Partly breast fed	255
(c) Artificially fed	1,734

DUNDEE, 1926.

BIRTHS IN AREA OR DISTRICT.

Total No. of Births during 1926.	Total No. of Deaths of Newly-Born Children during 1926.	Actual No. of Births Attended by Midwives during 1926.	Actual No. of Deaths of Newly-Born Children occurring in the Practice of Midwives during 1926.	Actual No. of Cases not attended by a Doctor or Midwife during 1926. Births Deaths
5983	149	1470	40	2 0

CASES OF OPHTHALMIA NEONATORUM.

Total No. of Cases during 1926.	Actual No. of Cases occurring in the Practice of Midwives during 1926.	Actual No. of Cases occurring where Confinement not attended by a Doctor or Midwife during 1926.
64	31	0

CASES OF PUERPERAL SEPSIS.

Total No. of Cases during 1926.	Total No. of Deaths during 1926.	Actual No. of Cases and Deaths occurring in the Practice of Midwives during 1926.	Actual No. of Cases and Deaths occurring where Confinement not attended by a Doctor or Midwife during 1926. Cases. Deaths.
15	9	Cases, 2 Deaths, 1	Cases, 0 Deaths, 0

CASES OF STILL-BIRTH.

Total No. of Cases during 1926.	Actual No. of Cases occurring in Practice of Midwives during 1926.
178	46

CASES OF EMERGENCY.

Total No. of Cases of Emergency, in which Medical Practitioners have been called in under Section 22 of the Act, during 1926.	Distinguishing the different cases of emergency.
Ante-natal. 114	Post-natal. 67
	Infant. 150

MIDWIVES (SCOTLAND) ACT, 1915.

The following is a list of Midwives who, during January, 1927, intimated their intention to practice Midwifery in the City of Dundee.

NAME and ADDRESS.	C.M.B. Reg. No.	REMARKS.
Adamson, Miss Agnes—Arundel Nursing Home, 16 Constitution Terrace	4,201	Trained.
Anderson, Mrs. Isabel—4 Ferguson Street ...	2,863	Trained.
Angus, Mrs. Clementina—96 King St., B.F. ...	3,057	Bona fide.
Arnott, Miss Jean—36 Dundonald Street ...	1,182	Bona fide.
Bowman, Mrs. Jessie—10 Hilltown ...	4,958	Trained.
Cartmill, Mrs. Ann—11 Gardner Street ...	3,373	Bona fide.
Clark, Miss Alexandrina—287 Hilltown ...	400	Bona fide.
Craig, Mrs. Margaret—8 Wallace Street ...	6,994	Trained.
Dobson, Mrs. R. H.—6 Glamis Drive. ...	4,423	Trained.
Gouk, Miss Margaret—10 Tofthill... ...	6,221	Trained.
Gowans, Miss Eliza—2 Erskine Street ...	5,925	Trained.
Gunn, Mrs. Sarah—78 Peddie Street ...	5,404	Trained.
King, Mrs. Ellen—4 Millers Wynd ...	755	Trained.
Lindsay, Mrs. Marion—3 Gowrie Street ...	6,457	Trained.
Low, Mrs. Helen—2 Elizabeth Street ...	5,186	Trained.
Lowe, Mrs. Jane R.—2 Brown Street ...	432	Trained.
Masson, Mrs. Jane—3 Tayview Buildings, B.F.	3,122	Bona fide.
M'Donald, Mrs. H.—31 Brook Street ...	410	Trained.
M'Donald, Miss Mary H.—31 Brook Street ...	6,851	Trained.
M'Donald, Miss Catherine—31 Brook Street ...	7,116	Trained.
Ramsay, Mrs. Ann C.—4 Ogilvies Road ...	733	Trained.
Rickard, Mrs. Helen—29 Step Row ...	6,453	Trained.
Robinson, Mrs. Winifred—Arundel Nursing Home, 16 Constitution Terrace	2,347	Trained.
Smith, Mrs. Jamesina—73 Church Street ...	1,553	Bona fide.
Tulloch, Mrs. Isabella—179a Blackness Road ...	6,231	Trained.
Wallace, Mrs. Elizabeth—7 Kinnaird Street ...	2,279	Trained.
Webster, Mrs. Elizabeth—48 Blackscroft ...	411	Bona fide.
Whitaker, Miss Mary—Seafield Lodge (S.A.H.)	37,139	Trained.

Annual Report.

In January, 1926, 25 Midwives notified their intention to practice Midwifery in Dundee. During the year 8 Midwives gave notice of intention to practise in Dundee.

2 left town.

1 gave up practice.

This leaves on the Local Roll of Midwives at the end of December, 1926, (30) names. 21 of these 30 are actually practising as Midwives.

The Midwives attended a total of (1470) births that is 36.9% of the total births, (including stillbirths, occurring in the City during the year).

The extent of the individual practice of the Midwives varies:— one Midwife having (184) cases, another only attended (5) cases. The average to each Midwife in practice is (49) cases.

(88) visits were paid by the Inspector of Midwives and her Assistant to the Midwives homes, and (4) visits were paid to cases attended by Midwives.

(4) Lectures were given to Midwives on special subjects connected with their work.

Notifications.

607 Notifications have been received from the Midwives as follows:—

(1) Application for Medical Assistance—(a) Mother	...	410
(b) Child	...	130
(2) Notification of Death—(a) Mother		0
(b) Child		14
(3) Notification of Stillbirth		46
(4) Notification of laying out dead body		1
(5) Notification of liability to be a source of infection	...	6

Classification of application for Medical Assistance (540 cases).

Ante-natal 114.

1. Urine for examination	...	5
2. Examination of Primipara	...	13
3. Examination of Multipara	...	25
4. Abortion	...	10
5. Threatened Abortion	...	2
6. Prolapse of Uterus	...	1
7. Excessive sickness	...	1
8. Albuminuria	...	6
9. Oedema	...	8
10. Varicose veins	...	3
11. Vaginal Discharge	...	6
12. Pain (various)	...	20
13. Giddiness	...	2
14. Unclassified	...	12

Labour 229.

1. Prolonged Labour	...	99
2. Obstructed Labour	...	1
Hæmorrhage	...	1
3. Contracted Pelvis	...	35
4. Abnormal Presentation	...	7
5. Funis Presentation	...	4
6. Adherent placenta	...	3
7. Placenta Prævia	...	13
8. Ante Partum Hæmorrhage	...	6
9. Post Partum Hæmorrhage	...	50
10. Ruptured perineum	...	2
11. Eclampsia	...	1
12. Hydramnios	...	4
13. Collapse	...	1
14. Albuminuria during labour	...	1
15. Fœtid Discharge	...	1
Inertia	...	1
16. Hysteria	...	1

Post-natal 67.

1. High Temperature	14
2. Headache	2
3. Abdominal Pain	7
4. Pain (various)	12
5. Swollen feet and legs	3
6. Swollen face	1
7. Swelling (Labia)	1
8. Varicose Veins	8
9. Vaginal Discharge	2
10. Collapse (3rd day)	1
11. Weakness	6
12. Persistent Nausea	2
13. Mastitis	2
14. Cough	3
15. Bronchitis	1
16. Rash	1
17. Unclassified	1

Infant 130.

1. Stillbirths	19
2. Sudden death	4
3. Asphyxia	1
4. Feeble Infant	37
5. Discharging eyes	23
6. Cyanosis	5
7. Icterus Neonatorum	"
8. Congenital Malformation	8
9. Tongue tie	4
10. Hernia	1
11. Egorged breasts	3
12. Abscess Breast	1
13. Rash	4
14. Excoriation Scrotum	1
15. Discharging umbilicus	3
16. Septic Blisters	1
17. Cephal-Hæmatoma	1
18. Swollen genitals	1
19. Abdominal Swelling	2
20. Convulsions	1
21. Twitching	1
22. Hæmatemesis	1
23. Coryza	1

Midwives.

REPRIMANDS.

During the year 2 cases of Neglect of Rules were reported to Central Midwives Board :—

(a) One Midwife had neglected to notify the Local Authority that she had left Dundee.

(b) One Midwife reported at once to Inspector of Midwives that she had infringed Rule E.7 of Central Midwives Board ; the case was reported to Central Midwives Board with a covering letter explaining the reason.

One Midwife was reprimanded for not securing Medical advice for an Infant found by a Health Visitor to be suffering from a severe form of Icterus Neonatorum. This condition was stated to have been very slight when the Midwife ceased attending.

SUSPENSIONS.

During the year 2 Midwives were suspended for 8 and 5 days respectively, on account of having been exposed to infection with Scarlet Fever. Central Midwives Board notified and formal notice was given to Midwives concerned.

HANDY WOMEN.

2 cases of birth were attended by Handy Women only, and the particulars were as follows :—

In the first case, on investigation, it was found that the Handy Woman in question had already been reprimanded 3 times; she was again interviewed and warned.

In the other case, a monthly nurse reported at once that she had inadvertently attended a case as a Handy Woman. She had been given to understand that a Doctor was also to be present, but no Doctor had ever been engaged. Infant was born before the Doctor could be summoned, and a Medical Aid Form was required on account of Adherent Placenta.

PUERPERAL DEATHS.

During 1926 an inquiry was made into (27) deaths of Women, occurring at Childbirth or within 28 days after. Of these :—

Attended by a doctor	...	...	...	...	4 (1 rural)
Attended by a doctor and midwife	...	...	...	...	7
Attended by Maternity Ward, Dundee Royal Infirmary (I.P.)	...	...	...	...	8
Attended by Maternity Ward, Dundee Royal Infirmary (O.P.)	...	...	...	...	3
Attended by a midwife	...	...	...	...	3
Attended by Eastern Poorhouse Hospital	...	...	...	...	2

14 Women died during Pregnancy :—

After abortion (4 induced)	...	...	...	...	9
In labour (undelivered)	...	...	...	...	3
Not in labour (undelivered)	...	...	...	...	2

Of the 9 Abortions :—

2 occurred in a nursing home (1 rural), 2 induced.

5 occurred in Dundee Royal Infirmary, 1 ectopic gestation (2 induced).

1 was a rural case admitted to Dundee Royal Infirmary.

1 was delivered in a lodging-house with no skilled attendant, and afterwards admitted to the Eastern Poorhouse.

Of the 3 who died in Labour undelivered :—

2 were admitted to Maternity Ward, Dundee Royal Infirmary, by private doctors.

1 was a case of acute pneumonia admitted to Medical Ward, Dundee Royal Infirmary.

Of the 2 who were not in Labour :—

1 died in Dundee Royal Infirmary.

1 died at home attended by a private doctor.

CLASSIFICATION OF NOTIFIED CAUSES OF DEATH (41 Deaths).

(a) Causes of Death directly connected with Parturition—13 Cases.

Puerperal sepsis	...	...	...	...	6
Puerperal sepsis with endometritis salpingitis	...	...	...	...	1
Puerperal sepsis with pyæmia	...	...	...	...	1
Puerepral sepsis with pyosalpinx	...	...	...	...	1
Secondary post partum hæmorrhage	...	...	...	...	1
Placenta prævia	...	...	...	...	2
Contracted pelvis, Cæsarian section	...	...	...	...	1

(b) Causes of Death indirectly connected with Parturition—9 Cases.

Embolism	...	...	...	...	2
Pulmonary infarction	...	...	...	...	1
Pulmonary embolism after parturition	...	...	...	...	1
Cerebral embolism	...	...	...	...	1
Thrombosis (21 days) embolism	...	...	...	...	1
Phlegmasia alba dolens	...	...	...	...	1
General peritonitis	...	...	...	...	2

(c) Causes of Death not connected with Parturition—5 Cases.

Hæmorrhagic cystitis septicæmia	...	...	...	...	1
Chronic valvular heart disease, secondary pneumonia	...	...	...	...	1
Broncho pneumonia	...	...	...	...	1
Broncho pneumonia, with specific debility	...	...	...	...	1
Broncho pneumonia, cholecystitis, debility following confinement	...	...	...	...	1

(d) Causes of Death of Women who died during Pregnancy—14 Cases.

Eclampsia	...	...	...	...	1
Eclampsia with thrombosis	...	...	...	...	1
Hyperemesis gravidarum	...	...	...	...	5
Albuminuria of pregnancy	...	...	...	...	1
Albuminuria of pregnancy with valvular heart disease	...	...	...	...	1
Ruptured ectopic gestation	...	...	...	...	1
Placenta Praevia ante partum hæmorrhage	...	...	...	...	1
Post abortive endometritis	...	...	...	...	1
Lobar pneumonia	...	...	...	...	1
Chorea of pregnancy	...	...	...	...	1

Particulars of Deaths due to Puerperal Sepsis—9 Cases.

Attended by Maternity Ward (I.P.)	...	...	...	4
Attended by Maternity Ward (O.P.)	...	...	...	2
Attended by a doctor (1 rural case)	...	...	...	2
Attended by a midwife	...	...	...	1

SPECIAL PARTICULARS.

Normal confinement	...	...	...	...	2
Normal confinement, retained membranes	...	...	...	...	1
Retained placenta	...	...	...	...	1
Retained placenta (collapse from loss of blood)	...	...	...	...	1
Ruptured perineum	...	...	...	...	1
Ruptured perineum, Breech presentation	...	...	...	...	1
Instrumental delivery, ruptured perineum, slight hydramnios	...	...	...	...	1
Endometritis Salpingitis	...	...	...	...	1

Puerperal Sepsis :—

15 Cases of Puerperal Sepsis occurred in 1926.

9 died.

6 recovered (1 died later, January, 1927).

2 of these were attended at birth by a Midwife.

1 died.

1 recovered.

8 of these were attended at birth by Maternity Ward.

5 (in patients), 4 died, 1 recovered.

3 (out patients), 2 died (1926), 1 died (1927).

5 cases were attended at birth by Doctors.

2 died (1 rural), 1 died in Ward 18 Dundee Royal Infirmary.
3 recovered.

STILLBIRTHS.

178 Stillbirths were notified during 1926.

47 of these occurred in the practice of Midwives :—

31 were full-time infants.

16 were premature infants.

Of the 31 Fulltime Infants :—

13 were cases of macerated foetus.

12 were due to complications during labour or congenital deformities.

6 were unclassified.

Of the 16 Premature Infants :—

10 were cases of macerated foetus.

3 were due to complications or congenital deformities.

3 were unclassified.

Ophthalmia Neonatorum.

64 Cases of Ophthalmia Neonatorum were notified during the year. Of these :—

18 were notified by doctors.

16 were notified by midwives.

9 were notified by doctor and midwife.

4 were notified by Maternity Ward (I.P.).

2 were notified by Maternity Ward (O.P.).

11 were notified by the Child Welfare Department.

3 were notified by the Eye Institution.

1 was notified by the Eastern Poorhouse Hospital.

Of these 64 cases :—

15 were attended at birth by doctors out of a total of 1050 confinements.

31 were attended at birth by midwives out of a total of 1470 confinements.

2 were attended at birth by doctor and midwife out of a total of 143 confinements.

8 were attended at birth by Maternity Ward (I.P.), and

7 were attended at birth by Maternity Ward (O.P.), out of a total of 1295 confinements.

1 was attended at birth by Maternity Ward of the Eastern Poorhouse Hospital out of a total of 23 confinements.

0 cases attended at birth by handywomen out of a total of 2 confinements.

Treatment and Results :—

2 not visited.

62 initial visits.

993 re-visits.

Admitted to Hospital :—

4 cases were admitted to King's Cross Hospital.

1 case occurred in the Eastern Poorhouse Hospital (not visited).

1 case occurred in the Maternity Ward, Dundee Royal Infirmary (not visited).

62 cases recovered completely.

1 case recovered, but child died before discharge.

1 case in Eastern Poorhouse Hospital was reported to have recovered.

Report of the Dental Clinic.

I beg to submit my Annual Report for 1926.

The attendances at the Dental Clinic maintained about the same average as usual.

I am convinced however that many more would attend if only mothers and prospective mothers could be made to realise the importance of dental treatment, not only to themselves but to their children.

I feel that with the removal of the Clinic to the Headquarters in Victoria Road much more may be done in this direction and that the number of patients will show a marked increase.

The following are details of the work done :—

ATTENDANCES.

				Mothers.	
				A.N.	P.N.
New Cases	...	...	36	6	20
Re-visits	...	...	8	5	60

TREATMENT.

Extractions (temporary)	...	...	...	9
Extractions (permanent)	...	...	...	47
Fillings	...	...	...	41
Scaling	...	...	...	15
Dressings	...	...	...	62
Advice	...	...	...	21
Gum treatment	...	...	...	6
Dentures (supplied)	...	...	...	1
Dentures (repaired)	...	...	...	3

H. GORDON CAMPBELL,

L.R.C.P. & S.E., L.D.S.

Report of the Ante-Natal Clinic.

The attendances at the Ante-natal Clinic during 1926 again show an increase on the previous year.

The Midwives continue to send a fair proportion of cases, but there are still many pregnant women, who do not come under Medical supervision, because they suffer from no complaints, and it therefore lies with the Midwife, when she is engaged for a case, to persuade every patient to present herself at least once during the Ante-natal period.

It is important that the patient should come early in pregnancy.

ANALYSIS OF REPORT.

Total number of visits :—

New Cases	...	...	...	...	...	230	
Re-Visits	...	...	...	...	...	206	
							436

New Cases :—

Ante-natal	...	...	...	...	...	185	
Post-natal	...	...	...	...	...	38	
Not pregnant	...	...	...	...	...	7	
							230

Re-Visits :—

Ante-natal	...	...	...	...	...	193	
Post-natal	...	...	...	...	...	12	
Not pregnant	...	...	...	...	...	1	
							206

Treatment of patients :—

Ante-natal—218.

Referred to Ante-natal Ward	...	...	...	...	29	
Referred to family Doctor	...	...	...	...	10	
Treated at Clinic	...	...	...	...	179	
						218

Post-natal—42.

Referred to D.R.I.	...	...	...	...	11	
Referred to family Doctor	...	...	...	...	2	
Treated at Clinic	...	...	...	...	29	
						42

Not pregnant.

Referred to D.R.I.	...	...	...	...	4	
Referred to family Doctor	...	...	...	...	1	
Treated at Clinic	...	...	...	...	2	
						7

ANALYSIS OF NEW CASES.

Ante-natal—

Advice (no complaint)	...	...	...	...	116
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Conditions due to pregnancy :—

Albuminuria	...	...	...	...	3
Ante-partum hæmorrhage	...	...	...	...	6
Hydramnios	...	...	...	...	3
Vomiting	...	...	...	...	9
Oedema	...	...	...	...	3
Threatened miscarriage	...	...	...	...	1

Conditions aggravated by pregnancy :—

Varix	...	...	...	...	13
Hæmorrhoids	...	...	...	...	2

Conditions complicating pregnancy :—

Malpresentation	...	...	...	...	1
Prolapse	...	...	...	...	2
Retroversion	...	...	...	...	1
Discharge	...	...	...	...	3
Constipation	...	...	...	...	11
Cardiac	...	...	...	...	1
Gonorrhœa	...	...	...	...	1
Various	...	...	...	...	7

 185

Post-natal :—

Advice	...	...	...	...	10
Retroversion	...	...	...	...	2
Cystocele	...	...	...	...	2
Leucorrhœa	...	...	...	...	3
Menorrhagia	...	...	...	...	8
Constipation	...	...	...	...	2
Ventral Hernia	...	...	...	...	1
Albuminuria	...	...	...	...	1
Debility	...	...	...	...	1
Syphilis	...	...	...	...	1
Various	...	...	...	...	7

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Report on Special V.D. Clinic.

The number of new cases for 1926 shows a considerable increase over the number for 1925, and this applies to both mothers and children. It is interesting to observe that a fairly large proportion of these new cases were found on examination not to be suffering from Venereal Disease.

The total attendances were also much higher than during 1925. It will be noted, however, that although the number of new cases of Gonorrhœa had increased, the number of attendances of Gonorrhœa patients diminished. This is disappointing, and one would like to see Gonorrhœa cases attend more frequently and more regularly.

The increase on the number of patients attending involved also an increase in the amount of treatment given as shown by the increase in the number of Doses of Salvarsan substitutes, and Bismuth preparations administered. The number of Wassermann tests, Gonococcal Complement Fixation tests, and Microscopical examinations also showed a corresponding increase.

ANALYSIS OF CASES.

			Mothers.	Children.	Total.
New Cases	...	...	52 (34)	48 (36)	100 (70)
Attendances	...	...	467 (377)	141 (96)	608 (473)

NEW CASES.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Not suffering from Venereal Disease.	TOTAL.
Mothers	11 (12)	6 (3)	—	35 (19)	52 (34)
Children	9 (13)	—	—	39 (23)	48 (36)
	20 (25)	6 (3)	0	74 (42)	100 (70)

ATTENDANCES.

Mothers	287 (204)	85 (144)	1 (0)	94 (29)	467 (377)
Children	50 (61)	—	—	91 (35)	141 (96)
	337 (265)	85 (144)	1 (0)	185 (64)	608 (473)

Wassermann tests	...	...	...	...	109 (70)
Gonococcal fixation tests	...	...	...	...	11 (7)
Microscopical Examinations	...	...	...	...	50 (20)
Doses of salvarsan substitutes administered	...	...	...	...	53 (29)
Doses of bismuth preparations administered	...	...	...	...	72 (57)

N.B.—The figures in brackets are those for the year 1925.

ANNIE A. FULTON, M.B., Ch. B., D.P.H.,

Venereal Diseases Scheme.

Dr. Averill's Report.

No change has taken place during 1926 in the working of the Venereal Diseases Scheme for the City. As in previous years the work has been carried on in the same Institutions, pending the completion of the new Public Health Institute. When the latter is ready, all work associated with the scheme will be transferred to this Institution, a change which should considerably facilitate the work in all its branches, and also do much to increase attendance on the part of patients. The male clinic as at present situated is not sufficiently central to meet the needs of all parts of the City.

Little variation has taken place in the work actually done throughout the year, except that once again there has been an increase in the number of new cases reporting for advice and treatment.

The total number of new patients who reported during 1926 was 1,019; an increase of 86 over the previous year. Of these new cases there were 597 males and 422 females, both showing an increase over the previous year of respectively 72 and 14.

Throughout the year new cases of syphilis showed an increase over the previous year of 48. The increase was entirely due to the female clinic, as the male clinic showed a reduction of 13.

New cases of gonorrhœa showed an increase of 14 at the male clinic, while the female clinic showed a reduction of 14. Gonorrhœa, therefore, as a whole, showed no actual increase in total number of new cases.

A continued feature of interest was the number of people who sought advice, and who were found on examination to be free from any form of venereal disease. In this class there was an increase of 15 over the previous year, the male clinic showing a total increase of 30, but the female clinic showing a reduction of 15. This must be considered fairly satisfactory, and tends to show that a certain proportion, at least, of the community is beginning to realise the importance of seeking early advice immediately any untoward condition is apparent.

The total attendances at both clinics for the year were well maintained. The male clinic showed a slight decrease, while the female clinic showed an almost exactly corresponding increase. The result was an increase of 628 over the previous year, the actual totals being 13,746 for the male clinic, and 13,721 for the female clinic.

Indoor treatment still continues to be unsatisfactory, but this, of course, will be remedied once the Public Health Institute is opened. The in-patient days for 1926 were respectively—males, 325, and females, 74.

One has still to regret that, on the whole, patients suffering from venereal disease are not reporting any earlier than in former years, and the extremely unsatisfactory state of affairs from this point of view is well borne out by a perusal of the undernoted figures. It is extremely difficult to fathom the cause of this fatal negligence, but no doubt ignorance may account for a fair proportion of those who fail to seek early treatment. Particularly is this the case with regard to syphilis, and the evil is no doubt enhanced by the fact that the primary lesion is so frequently very insignificant in appearance.

Of cases suffering from gonorrhœa 32.6 per cent. reported early on in their infection. This was a marked improvement over the previous year, when the number was only 10 per cent. In the remainder of the patients the infection was unfortunately well established before reporting.

With regard to new cases of syphilis who reported during 1926, an analysis of these cases showed them to be made up as follows :—

With " Dark Ground " positive but Wassermann reaction still negative	...	...	...	...	...	10.3%
With " Dark Ground " positive and Wassermann reaction positive	...	...	...	...	...	6.5%
Suffering from secondary syphilis	...	...	...	...	...	26.1%
In the tertiary phase of syphilis	...	...	...	...	...	38.3%
Cases showing involvement of central nervous system (Tabes Dorsalis and General Paresis included)	...	...	...	...	...	18.7%

It will be noted from these figures, if compared with those of 1925, that there is a serious reduction in cases reporting early, while there is, correspondingly, a serious increase in those reporting in the later phases of syphilis.

Extremely few cases of congenital syphilis are brought for treatment, and unfortunately those that are brought are invariably suffering from phases of the disease that little can be done for.

There is nothing fresh to report with regard to the treatment of syphilis. In the case of gonorrhœa, however, diathermy has been introduced, and although very few cases have so far been treated by this method, one feels justified in hoping for fair results in, at least, a certain number of cases. Particularly in cases suffering from posterior urethritis or lesions due to involvement of the posterior urethra does one hope for an improvement otherwise extremely difficult to obtain.

Such a large amount of clinical material necessarily entailed a correspondingly large amount of bacteriological work, and for this I have cordially to thank Professor Tulloch and his staff, to whom I am much indebted for much helpful advice on many points.

The number of specimens examined by Professor Tulloch and his staff on behalf of the male and female clinics was as follows :—

Wassermann reaction	...	...	...	...	...	1,520
Special Wassermann	...	...	...	...	...	218
Gonococcus Complement Fixation Test...	...	...	...	...	...	438
Dark Ground Examinations	...	...	...	...	...	35
Urines	...	...	...	...	...	149
Smears	...	...	...	...	...	958
Total						3,318

On the whole the work for the year may be considered fairly satisfactory, but one has still to regret that a fair percentage of patients lapse before completing their treatment or before being finally tested as to cure.

I take this opportunity of thanking Dr. Fulton for her co-operation in helping to make the working of the female clinic successful, and also the other members of the staffs of both clinics for their assistance in carrying out so efficiently the various duties allocated to them.

NEW CASES.

January	...	50	29	7	2
February	...	38	27	8	0
March	...	55	27	7	3
April	...	46	33	5	3
May	...	39	42	9	1
June	...	38	40	3	5
July	...	39	36	9	3
August	...	36	28	17	1
September	...	39	29	11	2
October	...	30	37	11	2
November	...	43	44	9	0
December	...	40	26	8	2

Totals	...	493	398—891	104	24 128
Dundee	...	...	...	...	891
Other Areas	...	...	...	...	128

Total ... 1,019

Of these there were:—

DUNDEE.—Males.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January	6	26	3	8	7
February	6	13	0	7	12
March	10	21	0	14	10
April	5	15	0	12	14
May	9	17	0	7	6
June	8	14	2	2	12
July	8	12	0	7	12
August	7	23	1	2	3
September	6	14	1	10	8
October	5	15	0	5	5
November	5	18	2	8	10
December	8	14	2	7	9
Totals	83	202	11	89	108

Females.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January	22	1	1	0	5
February	20	0	1	0	6
March	11	2	3	0	11
April	19	4	1	0	9
May	27	4	1	0	10
June	26	4	4	0	6
July	21	4	0	0	11
August	15	3	2	0	8
September	22	4	1	0	2
October	20	7	4	0	6
November	30	4	3	0	7
December	17	3	1	0	5
Totals	250	40	22	0	86

OTHER AREAS.—Males.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January ...	4	1	0	1	1
February ...	3	2	0	3	0
March ...	2	4	0	1	0
April ...	2	3	0	0	0
May ...	2	6	0	0	1
June ...	0	2	1	0	0
July ...	2	6	0	1	0
August ...	5	9	0	1	2
September ...	4	5	1	0	1
October ...	3	4	1	2	1
November ...	2	5	0	1	1
December ...	3	5	0	0	0
Totals ...	32	52	3	10	7

Females.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January ...	1	0	0	0	1
February ...	0	0	0	0	0
March ...	2	0	0	0	1
April ...	1	1	0	0	1
May ...	0	1	0	0	0
June ...	3	1	0	0	1
July ...	2	1	0	0	0
August ...	1	0	0	0	0
September ...	0	0	0	0	2
October ...	2	0	0	0	0
November ...	0	0	0	0	0
December ...	2	0	0	0	0
Totals ...	14	4	0	0	6

TOTAL NEW CASES.

				Males.	Females.
Syphilis ...	...	...	...	115	264
Gonorrhœa ...	...	...	...	254	44
Mixed Infections ...	...	...	...	14	22
Other V.D. ...	...	...	...	99	0
Not suffering from V.D. ...	...	...	...	115	92
Totals ...	...	...	...	597	422—1,019

AGE PERIODS.—Males.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
Under 1 year	4	1	0	0	0
1-5 years	4	0	0	0	5
5-15 „	13	0	0	0	3
15-25 „	15	84	4	42	42
25 yrs. and up.	79	169	10	57	65
Totals ...	115	254	14	99	115
Grand Total	...	...	...	...	597

Females.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
Under 1 year	12	0	0	0	5
1-5 years	12	2	0	0	6
5-15 „	48	7	0	0	20
15-25 „	45	14	8	0	18
25 yrs. and up.	147	21	14	0	43
Totals ...	264	44	22	0	92
Grand Total	...	...	...	...	422

ATTENDANCES.

	Dundee.		Other Areas.	
	Males.	Females.	Males.	Females.
January ...	1,165	1,138	48	83
February ...	1,071	1,057	53	57
March ...	1,085	1,188	91	62
April ...	1,023	1,018	81	65
May ...	778	1,071	61	45
June ...	943	1,074	43	68
July ...	813	970	62	81
August ...	999	935	139	74
September ...	1,208	997	97	81
October ...	1,260	1,036	96	68
November ...	1,174	1,259	79	62
December ...	1,304	1,179	73	53
Totals ...	12,823	12,922—25,745	923	799—1,722
Dundee ...	...	...	...	25,745
Other Areas ...	...	...	...	1,722

27,467

DUNDEE.—Males.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January ...	251	787	60	38	29
February ...	244	701	55	42	29
March ...	231	715	55	42	42
April ...	182	686	64	62	29
May ...	151	523	22	64	18
June ...	179	706	18	16	24
July ...	191	543	12	43	24
August ...	215	669	26	63	26
September ...	238	811	42	86	31
October ...	235	917	32	58	18
November ...	186	805	105	54	24
December ...	233	906	74	71	20
Totals ...	2,536	8,769	565	639	314

Females.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January ...	510	317	263	0	48
February ...	508	244	262	0	43
March ...	576	260	281	0	71
April ...	487	216	258	0	57
May ...	565	229	212	0	65
June ...	509	278	217	0	70
July ...	465	280	169	0	56
August ...	462	252	147	0	74
September ...	546	282	130	0	39
October ...	488	367	141	0	40
November ...	564	407	228	0	60
December ...	591	398	163	0	27
Totals ...	6,271	3,530	2,471	0	650

OTHER AREAS.—Males.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January ...	27	20	0	1	0
February ...	29	18	0	6	0
March ...	37	42	0	12	0
April ...	33	32	0	16	0
May ...	31	26	0	3	1
June ...	19	20	1	2	1
July ...	30	28	2	2	0
August ...	45	86	0	4	4
September ...	50	42	1	3	1
October ...	57	22	9	6	2
November ...	46	26	0	6	1
December ...	32	38	2	1	0
Totals ...	436	400	15	62	10

Females.

	Syphilis.	Gonorrhœa.	Mixed Infections.	Other V.D.	No V.D.
January ...	46	22	11	0	4
February ...	31	12	13	0	1
March ...	36	15	10	0	1
April ...	37	12	8	0	8
May ...	19	15	8	0	3
June ...	33	27	6	0	2
July ...	35	38	6	0	2
August ...	33	36	2	0	3
September ...	44	29	4	0	4
October ...	27	33	5	0	3
November ...	28	26	7	0	1
December ...	28	18	6	0	1
Totals ...	397	283	86	0	33

TOTAL ATTENDANCES.

	Males.	Females.
Syphilis ...	2,972	6,668
Gonorrhœa ...	9,169	3,813
Mixed Infections ...	580	2,557
Other V.D. ...	701	0
Not suffering from V.D. ...	324	683
Totals ...	13,746	13,721 = 27,467

SPECIAL TREATMENT ADMINISTERED.

Number of Intravenous and Intramuscular Injections given:—

	Neokharsivan					Kharsulphan.		
January	.15	.3	.45	.6	.75	.075	.15	.3
February	1	20	43	39	29	0	3	0
March	1	28	56	44	21	0	17	0
April	5	25	58	57	25	1	11	5
May	0	20	41	30	28	2	8	1
June	0	31	38	21	19	5	8	10
July	5	33	39	24	20	8	15	22
August	0	41	44	16	15	12	9	34
September	9	22	59	20	11	4	10	32
October	3	49	37	35	7	4	12	24
November	3	37	62	12	12	4	16	26
December	3	53	78	27	0	2	32	56
	3	47	78	33	0	3	18	88
Totals	33	406	633	358	187	45	159	298

Other Salvarsan Substitutes :—93.

	Bismuth.			Other Drugs
	.15	.3	.45	
January	11	6	38	35
February	78	172	34	50
March	93	182	45	53
April	66	112	38	47
May	63	125	32	37
June	57	133	33	39
July	54	126	24	22
August	65	110	39	10
September	91	127	31	31
October	74	181	26	23
November	92	185	38	39
December	76	153	38	22
Totals	820	1612	416	408

Totals—Neokharsivan	...	...	...	...	1,617
Kharsulphan	...	...	...	...	502
Other Salvarsan Substitutes	...	...	...	...	93
Bismuth	...	...	...	...	2,848
Other Drugs	...	...	...	...	408
Grand Total	...	...	...	...	5,468

NUMBER OF SPECIMENS EXAMINED ;—

	Wassermann Test.	Special Wassermann Test.	Gonococcus Complement Fixation Test.
January	124	32	31
February	100	22	19
March	119	19	40
April	90	15	22
May	114	17	20
June	139	11	38
July	105	19	36
August	140	9	54
September	152	18	43
October	131	18	37
November	153	14	41
December	153	24	57
Totals	1,520	218	438
	Dark Ground	Microscopic	

	Test.	Urine.	Smears.
January	0	7	114
February	0	9	67
March	5	21	93
April	6	12	80
May	4	15	66
June	1	9	66
July	6	7	53
August	1	8	87
September	3	11	75
October	3	11	105
November	3	20	72
December	3	19	80
Totals	35	149	958

Bacteriological Laboratory.

Professor Tulloch's Report.

REPORT OF WORK CARRIED OUT IN THE
DEPARTMENT OF BACTERIOLOGY, UNI-
VERSITY COLLEGE, DUNDEE, ON BEHALF
OF THE DUNDEE PUBLIC HEALTH AUTHO-
RITIES, FROM 1ST JANUARY, 1926, TO 31ST
DECEMBER, 1926.

The report is presented in the same fashion as in previous years, so that continuity of arrangement may be maintained.

I. CONTROL OF VENEREAL DISEASES.

(a) Control of Syphilis.

1. Dark Ground Examinations.
2. Wassermann Reactions (Routine).
3. Special Wassermann Reactions.
4. Examinations of cerebro-spinal fluids.

(b) Control of Gonorrhœa.

1. Microscopical examination of discharges and urines.
2. Gonococcus Complement Fixation tests.
3. Supply of Vaccine.

II. CONTROL OF OTHER COMMUNICABLE DISEASES.

(a) Diphtheria.

1. Throat swabs from cases and contacts.
2. Virulence tests,

(b) Enteric Fever.

1. Widal Reactions.
2. Examination of fæces in convalescents.
3. Blood Cultures.

(c) Tuberculosis.

III. SPECIAL INVESTIGATIONS.

- (a) Examination of Milks for contamination.
- (b) Examination of Milks for grading.
- (c) Routine examination of Milks for tuberculosis.
- (d) Examination of Milks for tuberculosis under the Tuberculosis Order.
- (e) Food Poisoning.
 1. Cheese.
 2. Milk.
 3. Suspected case of food poisoning in an Institution in Dundee.
- (f) Examination of rats for *Leptospira Ictero-hæmorrhagica*.
- (g) Primary Meningitis.
- (h) Fæces for Dysentery.
- (i) Prophylaxis in Anthrax.
- (j) Miscellaneous investigations.

I. CONTROL OF VENEREAL DISEASES.

(a) Control of Syphilis.

1. Microscopical examinations of material to demonstrate the presence of *Treponema pallidum*.

During 1926, 35 examinations were made for the presence of *T. Pallidum* in suspected syphilitic sores. This number shows an increase on the previous year, but is still much too small. It, therefore, appears that, notwithstanding the fact that although year after year attention is specially called to the importance of early diagnosis in syphilis, far too large a proportion of cases remain untreated for a longer

period than is necessary. The success of preventive and therapeutic measures in this, as in most other communicable diseases, is largely dependent upon early and accurate diagnosis. Delay in diagnosis and treatment means greater danger of spread of the disease, for, with modern methods of treatment the infectivity of a case of syphilis can be markedly reduced in a very short time.

It is repeated that it cannot be sufficiently emphasised that the Wasserman test, reliable though it be, cannot give the same unequivocal evidence of syphilitic infection as does the demonstration of *T. Pallidum* in morbid exudates.

Moreover, postponement of treatment means prolonged treatment, which is more costly, and the end results of which are much less satisfactory than when active treatment is commenced in the primary stage of the disease.

To call upon the Venereal Diseases Officers to treat late cases of syphilis in which the diagnosis could have been established with certainty during the early phases of the infection is to place upon these officers a burden of work and a responsibility which is quite unnecessary, and defeats, to a large extent, the object of the scheme for the control of Venereal Diseases.

The importance of early diagnosis and early active treatment cannot be over-emphasised.

2. Wassermann Reactions.

The results of the research work which was carried out in 1925 on the Wassermann test in this laboratory were made fully available during 1926 for the routine investigation of serums from cases of suspected syphilis. The value of the test has been very greatly enhanced by the improvement in technique which was then elaborated, and the results obtained fully bear out the hope that was expressed concerning the enhancement of reliability of this technique. Results conducted quantitatively, and comparable over long periods, are of much greater value to the clinical officers in charge of Venereal Diseases departments than are results which, although perfectly correct, cannot be expressed quantitatively and are not comparable over long periods. Dr. Averill informs me that the work of his department has

been greatly assisted by the introduction of this technique, which may be safely said to have been a success, in view of the experience of the past eighteen months.

The total number of tests carried out was 3361, of which 1520 were from the clinic, 317 from private practitioners, and 1524 from institutions other than the clinic. These figures are practically the same as for the preceding year.

To the total number there must be added 77 tests in which the material examined was cerebro-spinal fluid, and in such cases a reinforced method is always employed; so that the grand total of Wassermann reactions conducted is 3438.

3. Special (Quantitative) Wassermann Tests.

The special quantitative Wassermann reaction elaborated in 1925 was used during 1926 in order to control the treatment of cases attending for treatment at the clinics.

It has proved extremely valuable in determining the value of treatment, in determining the progress of treatment, and in the continued observation of Wassermann-fast cases. The number of investigations of this nature carried out during the year was 222; 219 being from the clinic and 3 from private practitioners.

4. Examination of Cerebro-spinal Fluids.

During 1926 the complete investigation of cerebro-spinal fluids from cases of suspected neuro-syphilis was continued, the examination in each instance being as complete as possible. In addition to the ordinary Wassermann test and reinforced Wassermann test, a complete chemical and cytological examination was performed, while the Lange gold test was employed as a routine.

It is worthy of note that nearly all of these 77 cases were submitted for examination by consultant physicians, indicating that neuro-syphilis continues to occur notwithstanding the great advances which have been made in treatment of this disease. This again calls attention to that which has been emphasised already, that **early and adequate** treatment of syphilis in its acute stages is essential.

(b) Control of Gonorrhœa.

One is pleased to note that the interest in this disease is being maintained, for the fact must not be lost sight of that gonorrhœa may be even a more serious malady than syphilis.

1. Microscopical examination of Discharges for the Diagnosis of and Control of Treatment in Gonorrhœa.

During 1926, 1359 microscopical examinations of material for the diagnosis and control of gonorrhœa were carried out. Of these 1184 were examinations of discharges and 175 were examinations of urine. These are distributed thus:—

	Discharges.	Urines.
From the Clinic	958	150
From Private Practitioners	113	25
From institutions other than the Clinic..	113	0

2. Investigation of cases of Gonorrhœa by the Complement Fixation Reaction.

During 1926, 504 complement fixation tests have been carried out with a view to the control of treatment or diagnosis of gonorrhœa. These were distributed thus:—From the clinic, 438; from institutions other than the clinic, 36; and from private practitioners, 30. This shows a slight increase as compared with 1925.

The grand total, then, of examinations conducted for the diagnosis and control of Venereal Diseases is as follows:—

Dark Ground Examinations	85
Wassermann reactions (ordinary)	3,361
Special quantitative Wassermanns	222
Special examinations of cerebro-spinal fluids	77
Microscopical examinations of discharges and urines	1,359
Gonococcus Complement Fixation Tests	504
	5,558

3. Gonococcal Vaccine.

During 1926 the laboratory has continued to supply both male and female clinics with gonococcus vaccines upon a large scale.

II.—EXAMINATIONS FOR THE CONTROL OF OTHER COMMUNICABLE DISEASES.

(a) Diphtheria.

1. Cultural examination of throat swabs.

Although during 1926 there has been no notably serious outbreak of diphtheria in Dundee, nevertheless a considerable number of cases have occurred, and the total number of swabs examined was 1962.

In connection with the examination of throat swabs two points call for comment, viz. :—(1) The result of the bacteriological examination of the throat is of great importance to the public health officer, and its value to the practitioner is no less great when he is dealing with doubtful cases; but when the clinical features suggest diphtheria, it is unwise to delay the administration of anti-toxin until the result of the bacteriological examination is available. A case which is clinically diphtheria should be treated as diphtheria. If complete investigation negatives the diagnosis, no harm is done; but harm is liable to be done to cases of diphtheria when the administration of serum is delayed. In cases which are clinically diphtheria it is well to have the diagnosis verified by bacteriological examination, but it is especially important that treatment be initiated *forthwith*. In order that no misunderstanding should arise from this cause every report on the examination of a throat swab which is negative is specially marked with the following notice :—

“ **IMPORTANT.**—Please note that a negative swab result does not exclude diphtheria. The laboratory findings presuppose that the suspicious lesion *has been touched with the swab*—NOT ALWAYS POSSIBLE IN CERTAIN TYPES OF DIPHTHERIA, ESPECIALLY LARYNGEAL DIPHTHERIA. CLINICALLY SUGGESTIVE cases should be treated without awaiting result of swab. **DELAY IS DANGEROUS.**”

2. Virulence Tests.

In all, during 1926, 18 tests have been made to determine the virulence of diphtheria bacilli present in the throats of convalescents. Of these, 10 were from patients in King's Cross Hospital, and one in private practice, the remainder being from institutions other than King's Cross Hospital. As in previous years, these tests have proved of value in expediting the discharge of patients from the Isolation Hospital.

(b) Control of Enteric Fever.

1. Widal Reactions.

A small number of cases of Enteric Fever occurred in the City during 1926, but there has been no extensive or serious outbreak of this disease.

In all 220 tests were carried out on 110 specimens of blood. The duplicate test against both Typhoid and Para Typhoid Beta continues to be employed as a routine, and again proved valuable, as the majority of the cases were due to the paratyphoid B bacillus, and often of a mild type, the clinical diagnosis of which presented some difficulty.

In past years the findings have been similar, with the exception of 1924, when typhoid was somewhat more prevalent than paratyphoid.

2. Blood Cultures.

The most satisfactory of all methods for diagnosing enteric fever is blood culture, as by this means an early and accurate diagnosis can be established. In the past this method has not found much favour among the practitioners of the City, but during 1925 a small number of cases were investigated by this procedure, and during the year under discussion the number has considerably increased, as the physicians of the City are now becoming more accustomed to this method of investigating cases of fever of a continued nature in which the obvious diagnosis on clinical grounds may be difficult to make.

3. Examination of fæces and urine from Enteric convalescents.

During 1926, 80 examinations of fæces and 3 examinations of urine from convalescents have been made. The paratyphoid bacillus was recovered from a number of these, but none of the patients became carriers, and in no instance did the micro-organism persist in the fæces for a lengthy period after convalescence.

(c) Control of Tuberculosis.

320 specimens of sputum were examined from cases in Dundee during 1925—again a slight decrease on the previous year. The ratio of negative to positive findings remains much as before.

Research on Tuberculosis still continues to occupy the staff of the laboratory, and encouraging results are now being obtained in the use of a new method of prevention. Much work will, however, have to be done before certain technical difficulties are overcome, and the value of the method assessed with accuracy.

III. SPECIAL INVESTIGATIONS.

(a) Examination of Milks for Contamination.

During 1926, 68 specimens of milk were examined by routine methods to determine the degree of bacterial contamination and the presence of organisms of faecal origin.

The results of these examinations in 68 cases are as follows:—

1. Test for presence of B. Coli.

Bacillus Coli test positive in .001 c.c. or less—Unsatisfactory, ...	9
Bacillus Coli test positive in .01 c.c. negative .001—Doubtful, ...	16
Bacillus Coli test positive in 0.1 c.c. negative .01 —Good, ...	17
Bacillus Coli test positive in 1. c.c. negative 0.1 —Very Good, ...	14
Bacillus Coli test negative in 1 c.c. —Excellent,...	12
Total	68

So far, then, as the B. Coli test is concerned, 43 of these milks are up to the standard of Grade A. milk, while 26 pass the more severe test for certified milk.

2. Total Number of Micro-organisms.

(a) Over 5,000,000 per c.c. ...	2
(b) Over 3,000,000 but less than 5,000,000 per c.c. ...	0
(c) Over 1,000,000 but less than 3,000,000 per c.c. ...	5
(d) Over 700,000 but less than 1,000,000 per c.c. ...	1
(e) Over 500,000 but less than 700,000 per c.c. ...	5
(f) Over 300,000 but less than 500,000 per c.c. ...	6
(g) Over 200,000 but less than 300,000 per c.c. ...	4
(h) Over 100,000 but less than 200,000 per c.c. ...	11
(i) Over 50,000 but less than 100,000 per c.c. ...	10
(j) Over 30,000 but less than 50,000 per c.c. ...	5
(k) Over 10,000 but less than 30,000 per c.c. ...	5
(l) Over 5,000 but less than 10,000 per c.c. ...	3
(m) Less than 5,000 per c.c. ...	10
(n) Count spoiled by spreading growth ...	1
Total ...	68

Therefore, from the standpoint of total content of all micro-organisms, 33 of the 68 milks are up to the standard of Grade A. milk, while 18 pass the more severe test for certified milk.

(b) Examination of Milks for Grading.

In addition to the 68 milks tested by routine methods there were four specimens for special examination as employed for grading and certification of milk. The investigation in such circumstances is conducted according to a standard method advised by the Scottish Board of Health, these milks being submitted by Dairies in Dundee for grading under the Milks (Special Designation) Order, 1922, and Amendment Order (Scotland), 1923. All four were remarkably clean milks, in that bacillus Coli could not be demonstrated even in 1 c.c., while the total bacterial count of each was as follows:—

2 less than 5,000 colonies per c.c.	...	...	...	...	2
1 over 5,000 but less than 10,000 colonies, per c.c.	...	...	...	...	1
1 over 30,000 but less than 50,000 colonies, per c.c.	...	...	...	...	1
					4

An additional specimen, making 73 in all, was submitted for examination because of a specific complaint concerning it.

This milk proved, however, to be fairly clean, the colon test being positive only in .01 c.c., and the total count of micro-organisms being over 30,000 but less than 50,000 per c.c.

(c) Routine Examination of Milk for the presence of Tubercle Bacilli.

During the year 24 routine specimens were submitted for special examination with a view to the demonstration of tubercle bacilli in milk. None, however, were found to contain tubercle bacilli.

(d) Examination of Milks for Tuberculosis under the Tuberculosis Order.

During 1926 an additional four specimens of milk were investigated for the presence of tubercle bacilli under the Tuberculosis Order. Of these four, three proved to be negative and one positive. While, in addition to these, two specimens were examined by microscopical methods alone, both being negative. The necessity for the examination by extended methods was not necessary in these two instances, as the animals were condemned on other grounds.

(e) Food Poisoning.

1. Cheese.

During the year 1926 one specimen of cheese was examined because of its condition, but no micro-organisms of known pathological significance were demonstrated in the material, and there was also no evidence of the presence of poisonous substances in this material.

2. Milk.

During 1926 a very definite outbreak of food poisoning due to the Gærtner bacillus occurred. This outbreak was of a widespread nature, and gave rise to severe gastro-enteritis. Over 300 cases were reported, these occurring amongst farm workers and their families on the farm where the outbreak originated, and among that part of the urban population to which milk from this farm was distributed. The cause of the outbreak was infection of a milk cow with the bacillus enteritis of Gærtner, and it is to be noted that outbreaks of food poisoning due to this micro-organism are not infrequently due to infection of milk. The proof of the source of infection was perfectly definite, the Gærtner bacillus having been isolated from both the milk which was distributed on the day on which the outbreak occurred, and also from three specimens of material from the cow itself. That this micro-organism recovered from the cow was responsible for the outbreak was definitely shown by its presence in the intestinal contents of victims of the outbreak, and also by the specific immunity response among convalescents. In all, during the course of the outbreak 30 specimens of fæces, 31 specimens of blood, one blood culture, one specimen of vomit, one specimen of milk which had been distributed, and three specimens of morbid material from the cow, were investigated. Whenever the source of the outbreak had been determined, the workers on the farm were kept under careful observation, and numerous specimens of fæces were examined from them in order to ensure that no one handling the milk remained infected. No secondary cases occurred, indicating that the methods employed for prevention of the disease were adequate.

3. Suspected Case of Food Poisoning in an Institution in Dundee.

A suspected case of food poisoning occurred in an institution in the City during 1926, and this was made the subject

of special investigation. Material from the case and supplies of serum were fully investigated, but the case ultimately proved to be one which was not due to food poisoning.

(f) Examination of Rats for the presence of the Causal Organism of Infective Jaundice.

During 1926 a survey of the rat population of the City with a view to determining the incidence among rats of infection with *leptospira icterohæmorrhagica* was completed. This survey showed that the incidence of *leptospira chæstosis* in the rats in Dundee was 13 per cent.—a figure practically the same as that obtained in London and in other centres where similar surveys have been made. The survey involved the examination of well over one hundred rats, results being accepted only when the investigation was conducted in optimum circumstances.

(g) Primary Meningitis.

During 1926, 8 cases of primary meningitis occurred in Dundee, and all were made the subject of extensive bacteriological examination. Three of these proved to be cases of cerebro-spinal (meningococcal) meningitis; while in four the causal organism was the pneumococcus. In one instance the meningitis, which appeared to be primary, was proved subsequently to be a secondary meningitis due to a septic condition. Although the number of cases of meningococcal meningitis is small, it is to be observed that this disease has been diagnosed more frequently in this City during 1926 than in any year since the formidable epidemic of the war years; and it would be wise, in view of this, to bear in mind the possibility of the reappearance of this malady in the population, especially as in the country around Dundee a small number of sporadic cases of this disease have also occurred during the year under consideration.

(h) Fæces for Dysentery.

During 1926, 6 specimens of fæces were examined for the presence of either the bacilli of bacillary dysentery or the amœba of amœbic dysentery. All with one exception proved negative, the exception being an instance in which *entamœba histolytica* was recovered from a man suffering from chronic dysentery acquired some years ago in the tropics. The

number of cases in which amœbic dysentery occurring as relapses, in men returned from service during the late war, is therefore apparently steadily declining.

(i) Prophylaxis in Anthrax.

As in previous years a supply of Sclavo's serum has been available in the laboratory for the prevention and treatment of anthrax. This was made use of for prophylactic purposes on one occasion by the Medical Officer of Health in order to protect one of the staff of the department who had been exposed to anthrax during the course of his occupation.

During the year there was one case of anthrax, which was treated by Sclavo's serum, with a satisfactory result.

(j) Miscellaneous Investigations.

In addition to the work categorized under the above headings, a number of miscellaneous tests, preparation of vaccines, etc., have been undertaken on behalf of the Public Health Authority of the City, while the less frequently used therapeutic sera have been available and supplied at short notice to the various hospitals in the City. Among these miscellaneous investigations are the following:—

1. Examination of swabs and fæces from Dundee Infant Hospital.

2. For King's Cross Hospital—examination of conjunctival swab for diphtheria. Examination of specimens of pus by general bacterioscopic methods and an examination of discharge from the ear in scarlet fever.

3. Preparation of vaccines. One for Ashludie Sanatorium; one for a member of the staff of the Public Health Department; several supplies of stock typhoid vaccine for special therapeutic methods in the Public Health clinics, and routine supply of gonococcus vaccine on a large scale, for the Venereal Diseases Clinics.

4. Two complete bacteriological examinations, of special samples of water, were conducted during the year.

5. In June, 1926, a shallow water pond at the west end of the City of Dundee became a nuisance in that large

numbers of mosquito larvæ were hatching out from it. The mosquitoes caused inconvenience to the surrounding district, and the water from this pond was investigated to determine the nature of the mosquitoes.

Several hundred of these were hatched out in the laboratory in order to exclude the possibility of their being either disease-bearing types of mosquitoes or that type of mosquito — *ochlerotatus detritus* — which on account of the severity of its bites is of some importance. All the larvæ proved, fortunately, to be those of the common gnat—*culex pipiens*—which, although its bites may cause slight inconvenience, is of no importance in relation to disease production.

The work of the laboratory on behalf of the Public Health Authority of the City has shown an increase in almost all departments of its activity, and this work has been carried out successfully largely because of the ready, willing and helpful co-operation of the staff of the Public Health Department and of the various clinics.

This co-operation does much to lighten the work and to make it more interesting, by increasing efficiency and by offering educational facilities to the Department and its ancillary clinics.

King's Cross Hospital.

Dr Petrie's Report.

During the year commencing 1st January, 1926, and ending 31st December, 1926, 1,634 cases of ordinary infectious disease and 117 cases of tuberculosis were admitted to the Hospital.

The daily average number in cases of ordinary infectious disease was 134.01, and in cases of tuberculosis 56.23.

The highest daily number of all patients in Hospital was 248 (on 14th October), while the lowest was 112 (on 2nd August).

Below is a table of all patients treated in Hospital during the past year :—

DISEASE.	In Hospital 31st Dec., 1925.	Admitted during 1926.	Discharged during 1926.	Died. during 1926.	Remaining in Hospital on 31st Dec., 1926.
Scarlet fever	88	832	830	21	69
Diphtheria	42	684	575	69	82
Measles	0	5	5	0	0
Enteric fever	2	20	21	1	0
Erysipelas	4	33	36	0	1
Diphtheria and scarlet fever	7	31	33	3	2
Ophthalmia Neonatorum	0	3	3	0	0
Diphtheria and Measles...	1	0	1	0	0
Mumps	0	5	4	0	1
Scarlet fever and chicken- pox	0	3	3	0	0
Cerebro-spinal Meningitis	0	4	0	4	0
Chickenpox	0	4	3	1	0
Diphtheria and Erysipelas	0	1	0	1	0
Diphtheria, Scarlet Fever and Mumps ..	1	0	1	0	0
Venereal Disease ...	0	7	3	2	2
Encephalitis Lethargica	0	1	1	0	0
Acute Anterior Polio- myelitis	0	1	1	0	0
Total Infectious Diseases	145	1,634	1,520	102	157
Tuberculosis	57	117	67	49	58
Total	202	1,751	1,587	151	215

The case mortality for the ordinary infectious diseases was 6.29 per cent., while for tuberculosis it was 42.24 per cent.

Scarlet Fever.

There were 832 cases of scarlet fever admitted to the wards during the year; 21 cases proved fatal, giving a case mortality of 2.47 per cent.

The ages and sexes were as follows :—

Age.	Cases.		Deaths.	
	M.	F.	M.	F.
Under 1 year ...	4	6	1	0
1- 2 years ..	23	26	1	0
2- 5 „ ...	132	136	6	4
5-15 „ ...	130	252	3	3
15-25 „ ...	21	57	1	0
25-45 „ ...	10	34	1	1
45 and over ...	0	1	0	0
	320	512	13	8
	832		21	

In 30 cases the diagnosis of scarlet fever was not confirmed. The following are the details of the diagnosis finally arrived at :—

Measles ...	1
Urticaria ...	1
Throat affections ...	7
Septic rash ...	2
Various adventitious rashes ...	13
No appreciable disease ...	6

In six cases diphtheria was present, as well as scarlet fever.

The following were the chief complications :—

Arthritis ...	17
Cervical adenitis ...	49
Cervical abscess ...	14
Otitis media ...	2
Otitis media with otorrhœa ...	60
Mastoid abscess ...	7
Rhinitis ...	56
Secondary throat ...	12
Nephritis ...	14
Albuminuria ...	5
Pneumonia ...	6
Conjunctivitis ...	1
Jaundice ...	3
Cardiac failure ...	2
Various abscesses ...	5

A considerable number of these required operative interference. Mr. Mathers performed mastoidectomy in 6 cases and paracentesis in 7. In 16 cases tonsils and adenoids were removed for chronic rhinitis or otorrhœa. In the majority of cases the treatment was effective, shortening to some extent the patients' stay in Hospital, and lessening the chance of their being still infective after discharge. During the year Mr. Mathers made 220 examinations of scarlet fever patients having ear, nose, or throat complications. Ultra-violet light therapy was used for a number of cases similar to the above, a recently installed mercury vapour lamp being employed. Increased facilities for this form of treatment would be advantageous.

The incidence of complications has been considerably lessened by the early administration of specific scarlet fever antistreptococcic serum. Its use relieves to a great extent the discomfort of the symptoms during the period of advance, the temperature falling to normal during 12 to 36 hours after its administration.

Another use of the specific serum is for the diagnosis of cases with erythematous eruptions by means of the Schultz Charlton reaction; this reaction is performed as a routine on all such cases admitted to Hospital.

The control of cross infection with diphtheria in the scarlet fever wards has been facilitated by the use of the Schick reaction. This is applied as a routine to all cases of scarlet fever admitted. On the occurrence of a case of cross infection with diphtheria, the susceptibles, being known, can be dealt with. An attempt is made to actively immunise susceptibles by the use of toxin anti-toxin mixture before discharge.

The epidemic of scarlet fever continued throughout the year, but owing to the concurrent epidemic of diphtheria only a limited number of beds could be allocated to scarlet fever.

The case mortality was less than that of last year, being 2.47 per cent. and 3.56 per cent. respectively.

Diphtheria.

During the year 684 cases were admitted to Hospital with a diagnosis of diphtheria; 69 cases proved fatal, giving a case mortality of 9.5 per cent. This compares favourably with last year's case mortality of 13.1 per cent.

The age and sex of the cases admitted were as follows :—

Age.		Cases.		Deaths.	
		M.	F.	M.	F.
Under 1 year ...	...	19	14	1	3
1- 2 years	...	48	32	9	6
2- 5 „	...	96	139	12	21
5-15 „	...	78	153	6	9
15-25 „	...	15	54	0	1
25-45 „	...	7	24	0	1
45 and over	...	2	3	0	0
Total		265	419	28	41
		684		69	

In 79 cases the provisional diagnosis of diphtheria was not confirmed. The following are details of the diagnosis finally arrived at :—

Scarlet fever	...	...	...	3
Tonsilitis and septic throat	...	...	...	57
Carrier only	...	...	...	3
Quinsy	...	...	...	6
Nephritis	...	...	...	1
Pneumonia	...	...	...	4
Rhinitis	...	...	...	2
Meningitis	...	...	...	1
Gumma of fauces	...	...	...	1
Chickenpox	...	...	...	1

Six cases admitted as diphtheria were found to have scarlet fever in addition.

Forty-three cases were of purely laryngeal type and 9 of mixed laryngeal and faucial type. Of the 52 cases, 22 died. Twenty-four required tracheotomy, and of these 17 died and 7 recovered.

Three cases were admitted to Hospital with a diagnosis of conjunctival diphtheria. One was confirmed bacteriologically and had also mild faucial diphtheria. The other two were cases of conjunctivitis due to B. Koch-Weekes.

The main complications noted were :—

Cervical adenitis	...	...	...	14
Cardiac complications	...	...	...	22
Otorrhœa	...	...	...	8
Rhinorrhœa	...	...	...	8
Albuminuria	...	...	...	6
Nephritis	...	...	...	2
Pneumonia	...	...	...	4
Secondary throat	...	...	...	4
Epistaxis	...	...	...	3
Hæmorrhages	...	...	...	1
Enteritis	...	...	...	1
Paralysis	...	...	...	46

Details of the different forms of paralysis are as follows :—

Palatal	...	...	...	11
Pharyngeal	...	...	...	6
Facial	...	...	...	1
Strabismus	...	...	...	19
Paralysis of limbs	...	...	...	2
Nasal	...	...	...	7

Thirty-four examinations of diphtheria patients suffering from ear, nose, or throat complications were made by Mr. Mathers, the Ear, Nose, and Throat Specialist.

While in Hospital 7 convalescents from diphtheria developed scarlet fever, 4 mumps, and 16 chickenpox. The spread of scarlet fever in diphtheria wards is easily controlled, the susceptibles being discovered by means of the Dick test, which is applied as a routine to all cases admitted with a diagnosis of diphtheria.

Susceptibles to chickenpox, measles, mumps, etc., are not known with any degree of certainty, a history of previous infection with the disease being in many cases unreliable. Owing to the very limited accommodation in the Hospital, it is exceedingly difficult and sometimes impossible to control effectively the spread of cross infection with these diseases.

The epidemic has been widespread and fairly severe. Most of the deaths occurred in patients admitted too late for treatment to be of much use. The delay in many cases seems to have been due to failure on the part of the parents to realise the nature and seriousness of the illness and to call in medical aid.

Measles.

During the year only five cases of measles were admitted, and all recovered. The expected epidemic has fortunately been delayed. Had it occurred during the diphtheria epidemic very few cases, if any, could have been admitted.

Enteric Fever.

Twenty cases were admitted during the year with a diagnosis of enteric fever. Of these, eleven were proved bacteriologically to be due to *B. paratyphosus* B. and seven to *B. typhosus*. In the remaining two the diagnosis was not confirmed.

Only one case proved fatal, having had mastoidectomy performed immediately before admission.

The other cases made an almost uneventful recovery.

The age and sex table is as follows :—

Age.		Cases.		Deaths.	
		M.	F.	M.	F.
Under 1 year ...	...	0	0	0	0
1- 5 years	...	4	1	0	1
5-15 „	...	7	3	0	0
15-25 „	...	1	2	0	0
25-45 „	...	1	1	0	0
45 and over	...	0	0	0	0
Total	...	13	7	0	1
		20		1	

Diphtheria and Scarlet Fever.

During the year 31 cases were admitted with a diagnosis of diphtheria and scarlet fever. Of these 16 were confirmed as suffering from both diseases. There were 3 deaths, 33 were discharged, and 2 remained in Hospital, there having been 7 in Hospital at the beginning of the year.

Erysipelas.

Thirty-three cases of erysipelas were admitted during the year. All recovered. Thirty-six were discharged and one remained in Hospital, there having been 4 in Hospital at the beginning of the year.

Tuberculosis.

117 cases of tuberculosis were admitted to Hospital during the year. 49 proved fatal, the case mortality being 42.24 per cent. 57 males and 60 females were admitted during the year; 32 males and 35 females being discharged.

The age and sex of the fatal cases were as follows :—

Age.		Males.	Females.	Total.
Under 1 year ...	...	0	0	0
1- 5 years	...	0	0	0
5-15 „	...	2	4	6
15-25 „	...	4	7	11
25-45 „	...	14	9	23
45-65 „	...	5	4	9
65 and over	...	0	0	0
		—	—	—
Total	...	25	24	49

Bacteriological Laboratory.

During the year, investigations carried out in the laboratory of the Hospital were as follows :—

Cultural investigation of throat swabs—

In-patients	...	...	...	...	5,429
Contacts	...	...	...	...	767
					—
Total	...				6,196

Specimens of sputum examined microscopically.. 332

REPORT

OF

Mr Ferrier, Veterinary Inspector.

DAIRIES.

During the year 311 Visits of Inspection were made by me to Dairies and 4,214 Cows were examined.

During the month of March the provisions of the Milk and Dairies (Scotland) Act, 1914, and the Tuberculosis Order, 1925, were put into operation, and 69 Special Visits of Examination were made to Dairies, to deal with cows suffering from tuberculous udders, tuberculous emaciation, chronic cough, and clinical symptoms of tuberculosis or cows yielding tuberculous milk.

Twenty-five cows were slaughtered under the Compensation Scheme, all of which under post mortem examination proved to be suffering from tuberculosis to some degree. Twelve of the aforesaid animals were affected with tuberculosis of the udder, four suffered from tuberculous emaciation and nine from chronic cough and showing clinical signs of tuberculosis.

Nine of the above twenty-five cows were subjected to the tuberculin test and reacted. Sixteen were slaughtered after clinical examination without testing with tuberculin and all were found on post mortem examination to have been suffering from tuberculosis, fourteen cases being of the advanced type and eleven not advanced as classified under the provisions of the Tuberculosis Order.

Other two cows suspected of having tuberculosis of the udder were subjected to the tuberculin test but failed to react, thus showing that both cows were free from tuberculosis and their milk appeared to be normal.

Six samples of milk were taken from six separate cows and submitted for bacteriological examination and all were declared negative, five of these samples were submitted for biological examination, four were declared negative and one positive.

Nineteen visits were made to sixteen cows which were tested with tuberculin for the purpose of supplying milk from cows certified by me to be free from tuberculosis. Six cows passed the test and ten cows failed to pass the test,

Meat Inspection at Slaughterhouses and Dead Meat Market.

Since the Public Health (Meat) Regulations (Scotland), 1924, came into force two Detention Officers are in constant attendance while every animal is being killed and dressed. Every organ is thus examined during the process and all carcasses suspected of being diseased are detained pending my examination. During the year my office was removed to the Slaughterhouse being much more convenient, and my duties there on an average occupy the whole forenoon. This more minute method of routine inspection has resulted in a greatly increased number of tubercular animals being detected.

The tables of Seizures, Comparisons, etc., in connection with the year's work have been compiled and the following is a synopsis of the compilation, viz.:—

TABLE XLIII.

(a) Shews the number of cases of tuberculosis detected during 1926 to be 1,517 as compared with 1,325 during 1925, an increase of 192 cases and a consequent increase in meat seized under this head amounting to 30,906 pounds.

(b) Other diseases :—

Pneumonia—Detections : 1926, 55 ; 1925, 59 ; a decrease of 4 cases, but an increase in seizures of 553 lbs.

Fevered Conditions—Detections : 1926, 129 ; 1925, 201 ; a decrease of 72 cases, with a decrease in seizures of 6,960 lbs.

Septic Conditions—Detections : 1926, 49 ; 1925, 40 ; an increase of 9 cases and an increase in seizures of 6,571 lbs.

Rheumatism—Detections : 1926, 14 ; 1925, 20 ; a decrease of 6 cases, but an increase in seizures of 457 lbs.

Fractures and Bruises—Detections : 1926, 112 ; 1925, 112 ; with an increase in seizures of 2,849 lbs.

Dropsical Conditions—Detections : 1926, 145 ; 1925, 174 ; a decrease of 29 cases and a decrease in seizures of 2,227 lbs.

Inflammation of Abdominal Organs—Detections : 1926, 73 ; 1925, 25 ; an increase of 48 cases and an increase in seizures of 787 lbs.

Asphyxiation—Detections : 1926, nil; 1925, 6; with a seizure of 1,514 lbs.

Anthrax—Detections, 1926, 2 cases and a seizure of 1,412 lbs.; 1925, no cases.

Decomposition—Detections : 1926, 66; 1925, 12; an increase of 54 cases and an increase in seizures of 6,805 lbs.

Actinomycosis—Detections : 1926, 23; 1925, 36, a decrease of 13 cases, with a decrease in seizures of 172 lbs.

Abscesses, Tumours and Cysts—Detections : 1926, 62; 1925, 36; an increase of 26 cases and an increase in seizures of 349 lbs.

Wasted Conditions—Detections : 1926, 14; 1925, 8; an increase of 6 cases, but a decrease in seizures of 259 lbs.

Lymphadenitis—Detections : 1926, 2; 1925, 3; a decrease of 1 case and a decrease in seizures of 636 lbs.

An analysis of the aforesaid Heads gives a total increase of 206 detections, and an increase in weight of Meat seized of 38,921 pounds for the year as compared with 1925.

TABLE XLIV.

Animals Slaughtered at Public Slaughterhouses.

Shews the number of detections of disease during the process of slaughter to be 3,528 in 1926 as compared with 1,714 during 1925, an increase of 1,814 cases for the year.

TABLE XLV.

Carcases Dressed and Undressed Brought to the Slaughterhouses.

Shews the number of detections of disease in consigned carcasses during 1926 to be 305 as compared with 343 in 1925, a decrease of 38 cases for the year.

During the year 1926—4,796 cattle, sheep and pig organs were seized and condemned as compared with 4,699 during 1925, an increase of 97 organs for the year.

Numerous carcasses are consigned to the Dead Meat Market here from different towns and districts outwith the City; which are evidently animals slaughtered in emergency. Some of them bear traces of slight examination, while others bear no traces of examination, yet they are often accompanied

by a certificate from the District Meat Inspector, certifying them to be fit for food. In many cases there is little or no attempt to carry out the provision of the Regulations of Meat Inspection to the extent necessary to arrive at a final decision. In fact some of them come here with a certificate and have marked on it "sent for further examination." In many of these cases a great deal of time is taken up daily in completing the examination of carcasses which ought to be done by the inspectors of the district from which they come before they are released, thus making it very apparent that we are still a very long way from having a uniform system of Meat Inspection.

CATTLE MARKET.

The Cattle Market is visited by me every market day (Tuesday), and all the cattle, sheep and pigs exposed for sale are inspected for the purpose of preventing animals showing symptoms of disease, and which are ultimately intended for human food, being sold. The Superintendent of the Market and I seize all suspicious animals exposed for sale in the fat stock market, under powers conferred by Section 43 of the Public Health (Scotland) Act, 1897, which renders the owners of animals so seized liable to prosecution. The owners of such animals are given the option of sending them to the slaughterhouse to be killed. There, the carcasses undergo a minute inspection, and are dealt with on their merits. In the event of the owner of such failing to comply with our request the animal can be seized and the owner prosecuted under the Act above mentioned.

ANTHRAX.

During the year three cases of Anthrax were detected and diagnosed at the slaughterhouse after examining the blood of the animals microscopically. A swab and smear of the blood along with a Report on each case was forwarded to the Ministry of Agriculture and Fisheries, London, where the diagnosis in each case was confirmed. Two carcasses were burned. The third, although diagnosed on arrival at slaughterhouse was not admitted and was returned to the farm it came from after all the openings of the body had been plugged with cotton wool to prevent any blood escaping from the carcass on its way back to the country.

SWINE FEVER.

During the year four visits were made to premises where an outbreak of swine fever occurred. There were 62 pigs on the premises; 36 fat pigs which had not contracted the fever were sent to slaughterhouse and killed; 17 younger pigs had been in contact with the diseased ones, some of which were infected were all killed and buried; the remaining number were brood sows all of which were in pig were treated with a swine fever vaccine and the premises thoroughly disinfected. There were no more cases.

Five visits were made to six pigs which were reported to have died; neither of them presented any symptoms of any contagious or infectious disease and were afterwards buried.

Two visits were also made to pigs which had been in contact with diseased ones, but they were all healthy.

PARASITIC MANGE.

During the year six visits were made to one horse infected with parasitic mange. It was reported to the Ministry of Agriculture and Fisheries, and five weekly reports were forwarded to them. A Restriction of Movement Notice was served on the owner preventing the horse from working and thus coming into contact with other horses. A copy of the Notice was sent to the Local Authority, Chief Constable, and Ministry of Agriculture.

FOOT AND MOUTH DISEASE.

There has been no outbreak of Foot and Mouth Disease in the City during the year.

IMPORTATION OF ANIMALS ACT, 1922.

Since the above Act came into operation Canadian and Irish Cattle are permitted to be landed in this country for immediate slaughter or for movement to farms, accompanied by licence issued by Inspectors of the Ministry, where they require to undergo six days' detention and are subject to constant supervision. 2,077 Irish and Canadian cattle were admitted into the City accompanied by licence, the inspection of which necessitated 225 visits.

ANIMALS TRANSIT AND GENERAL AMENDMENT ORDER OF 1924.

Under this Order all trucks or railway vehicles used for the conveyance of live stock must be washed, scrubbed and thoroughly cleansed, thereafter being disinfected before they can be again used for such a purpose. This order has been observed by the railway officials, and periodical visits have been made by me to the various railway stations.

VETERINARY ATTENDANCE ON HORSES BELONGING TO THE CORPORATION.

Six horses were examined for soundness before being purchased by the Horse and Provender Committee for the Cleansing Department. The attendance during the illness of horses belonging to the different Departments necessitated 100 visits. The whole Stud is in a satisfactory state of health and are in good working condition. There were two epidemics of influenza among the horses. The first was confined to the horses of Cleansing Department in Dock Street, but the second was among the horses of Works Department and of the Cleansing in Lochee. This was a very much more severe type of influenza; several of them had pneumonia as a complication, and two of them had a very severe attack of rheumatics in the tendons of the legs. They were put on the grass for some time and recovered, but after they were put back to work one of them had a relapse and had to be sold.

REPORT

OF

Mr Mitchell, Chief Sanitary Inspector.

SANITARY DEPARTMENT,
WEST BELL STREET,
DUNDEE, 1st June, 1927.

*To the Scottish Board of Health; and
the Lord Provost, Magistrates, and Councillors—
the Local Authority of the City of Dundee.*

GENTLEMEN,

I have the honour to submit my Annual Report showing the work of the Sanitary Department during the year 1926. The Report has been prepared in accordance with the requirements of the Board as contained in their circular dated 17th January, 1927.

Death-Rate: Density of Population and Acreage.

The death-rate per 1,000, as calculated and corrected by the Medical Officer of Health, for 1926, was 14.8, as against 16.7 in 1925, and 16.4 in 1924.

The population, as estimated to the middle of 1926 by the Registrar-General, is 170,060.

The acreage of the City, excluding foreshore, is 6,548. This works out at 25.97 persons to an acre.

Staff.

The number and composition of the Staff is as follows :—

- 1 Chief Sanitary Inspector.
- 1 Superintendent.
- 1 Plumber Inspector.
- 1 Housing Inspector.
- 2 Food Inspectors and Sampling Officers.
- 4 District Inspectors.
- 1 Epidemic Inspector.
- 1 Port Sanitary Officer.
- 5 District Officers.
- 1 Epidemic Officer.
- 2 Junior District Officers.
- 1 Clerk.

Total 21

Rainfall.

The total rainfall in Dundee, as noted at the Eastern Necropolis and reported by the Superintendent of Cemeteries, was 38.44 inches, as against 26.24 inches last year. The figures for each month are as follows:—

January	...	...	...	...	4.78 inches.
February	...	...	...	...	4.95 inches.
March	...	...	...	...	1.17 inches.
April	...	...	...	...	2.07 inches.
May	...	...	...	...	2.31 inches.
June	...	...	...	...	3.05 inches.
July	...	...	...	...	3.26 inches.
August	...	...	...	...	2.29 inches.
September	...	...	...	...	4.04 inches.
October	...	...	...	...	5.12 inches.
November	...	...	...	...	5.09 inches.
December	...	...	...	...	3.1 inches.

Total .. 38.44 inches.

This shows an average fall of 3.20 inches per month, as against 2.18 inches of the former year, and 2.97 inches in 1924.

Public Sewerage of the City.

Dundee is very happily situated for disposal of its sewage. It has direct discharge into the River Tay, thus obviating the vast expenditure which many inland towns have to bear when confronted with the problem of sewage disposal.

Dundee's chief trouble is flooding. During a heavy rain, owing to the sloping site of the City, storm water rapidly reaches the lower levels. Here, during high tides, it is held up owing to the fact that all sewers on the made-up ground to the south of the original shore are under water.

This year there were three severe rain storms within one month which caused very severe flooding throughout the City. Claims to the extent of £7,000 were lodged, and so far about £6,000 has been paid for compensation. A comprehensive report on the whole question has been prepared by the City Engineer and is now under consideration by the Town Council.

The work of constructing and maintaining sewers in the City is carried out by the Works Department under the City Engineer. During the past year approximately 2½

miles of new sewers were laid down, making the total length of sewers in the City 136.073 miles. In maintenance and repair the sum of £1,925 was spent.

Water Supply.

The Water Supply of the City belongs to the Corporation and may be looked upon as *par excellence*, in fact it is recognised as one of the best in the Country both in quality and quantity.

The works are under the charge of Mr. Geo. Baxter, jun., who is responsible for the supply of the City.

Practically the whole supply is drawn from Lintrathen Loch unless when one or other of the Lintrathen Trunk Mains is under repair in which case the Monikie Reservoirs are drawn upon to augment the reduced quantity from Lintrathen.

The average quantities of water drawn daily from the various Reservoirs during the past year were as follows:—

Lintrathen	...	...	...	...	9,021,000	gallons.
Monikie	...	...	...	...	805,000	„
Crombie	...	...	...	...	357,000	„
Total ...					10,183,000	„

This Total is higher by 357,000 gallons than the figures for the previous year.

The above total represents a daily consumpt per head of 48.5 gallons for the population of the Water Area—approximately 210,000. Of this rate per head 15.8 gallons represents the Meter supply for trade and general Public Health purposes, including street and sewer flushing, leaving a balance of approximately 32.7 gallons per head for general domestic purposes. Although 33 gallons per head is the average consumpt in the City and District, the consumpt per head varies between exceedingly wide limits, and is, unfortunately, least in those districts of the City where housing and congestion are worst, where it dwindles down to less than 10 gallons per head per day.

Compared with other cities in the British Isles 32.7 gallons per head per day for domestic purposes is a relatively high figure.

Domestic Water Supplies, Sinks, Etc.

In order to comply with the instructions of the Scottish Board of Health issued during 1925, that "the Sanitary Inspector include in his annual report the number of houses without water supply and sink inside the house," the City is being surveyed in Wards.

A commencement was made with Ward VI., the work of which was completed towards the end of the year when I reported to the Local Authority that "4,109 houses, or 93% have water laid on within the house, leaving 290 dwellings or 7% to derive their supply from taps on the stairs, landings, or back courts." As time permits the other Wards will be similarly dealt with. When the above report came before the Public Health Committee the question of water supplies within houses all over the City was considered, and the following recommendation issued:—"With regard to the question of water supply, the Chief Sanitary Inspector was instructed to adopt as his working standard the policy of a continuously maintained supply of water within each dwelling house, irrespective of size."

This is certainly a splendid standard to work up to. In many instances it is found that the sink on stairs, landings, etc., used in common by several tenants, is oftener a receptacle for foul matter and dirt than for its proper purpose. The result is that chokage takes place and offensive matter and waste water flow down the stairs, landings and through closes on to the public streets and it is usually impossible to locate the tenant responsible for the mischief.

Sixty-one sinks were last year provided at 24 different properties, the tenants of which had previously obtained their water supply from outside fittings.

Twenty-one properties have also had their water supplies augmented by the introduction of larger main service pipes. In regard to sinks we find the cast-iron type is yet numerous in use throughout the city.

Unlike certain cities we have no Bye-Law prohibiting the use of cast iron for such a purpose but there can be no doubt as to the superior hygienic value of the enamelled material—

cleaner in appearance, easier kept, unenclosed with wood, the enamelled sink creates a sweeter atmosphere in the house. The improvements in these water supplies will be continued as necessity and opportunity occur.

Scavenging and General Nuisances.

The Scavenging and Cleansing of the City are under the charge of the Superintendent of Cleansing, who is responsible for this section of the public health work. No serious nuisances relative thereto have come under my notice.

Complaints were made regarding offensive smells arising through loading operations at the banks at both the Fairmuir and West Stations.

The nuisance at the former was due to the escape of liquid filth, etc., during the process of loading the waggons and whilst these were standing at the siding—the filth and pools of stagnant manure water remaining at the loading banks and along between the rails.

At the latter there were on both sides of the loading banks pools of water between the rails, along with filth in a stagnant state and from which nauseating odours were arising. Besides, the permanent way in the vicinity was in a very unsatisfactory state.

In each instance there was just cause for the complaints.

The existence of these nuisances was brought to the notice of the representatives of the Railway Company, who arranged to have the loading banks and grounds in connection therewith properly cleansed and purified, and gave the assurance that more care would be exercised in the course of loading, besides getting the waggons despatched to their destination at the earliest possible moment, and not allow them to remain in the sidings as standing menaces to health.

The vacant piece of ground at Seabraes, under the charge of the Parks Superintendent, had become a source of nuisance through the public utilising it as a privy, besides depositing rubbish, waste paper, etc., thereon. The surface was fetid with human excreta. The attention of the official

responsible was directed to the conditions prevailing, and he adopted cleansing operations. A decided improvement was effected at No. 38½ Strathmartine Road, where a shop and other buildings were used as club rooms. Owing to there being no sanitary conveniences, or accommodation suitable, this want and the nuisance accruing were brought to the notice of the property owner. The buildings themselves were insanitary, dilapidated, and totally unsuitable for the purpose of club rooms. Latterly they were demolished.

Several householders in the west end were annoyed with a plague of mosquitoes invading their homes in the summer months, and serious complaints were made in reference thereto. Enquiries were set on foot which directed attention to a gathering of stagnant water known locally as "M'Millan's Pond," situated at the west end of the Magdalen Green, verging on to the north side of the railway. This is an old stagnant pool—doubtless at one time or another subject to the tidal influence of the river.

A sample of the water, and the larvæ on the top thereof, were taken and submitted to Prof. Tulloch, who reported the result of his investigations to the Medical Officer of Health, and further particulars will be found in the report of Dr. Burgess.

The representatives of the estate on which the source of the nuisance was situate, on being made aware of the annoyance, agreed to give the ground off for recreation purposes, under the charge of the Town Council, making the stipulation that the ground be filled up with materials wholly free from odour and from any decaying organic matter, and, further, that the ground be filled up to a level of three feet above the ordinary high water level of the tide in the river. The work of filling up is now in progress, and when finished will add to the recreation grounds in the west end, besides improving the amenities of the houses in the neighbourhood.

The nuisances otherwise and generally met with were of the usual routine type, such as choked or defective water closets, choked or leaky drains, accumulations of filth and rubbish, defective rhones, dirty stairs or passages, occupiers of tenemental properties not taking their turns of weekly washing conveniences, stairs, etc., petty defects of structural work, etc., etc.

Nuisances such as these mostly require quick action and prompt means of removal to prevent them assuming dimensions injurious to the public health. A continuous inspection on these lines has to be maintained in an endeavour to keep the houses and their environment free, as far as possible, from insanitary conditions. Much of this class of nuisance is, however, attributable to wilful destruction, carelessness, or filthy habits of the occupiers, and give a considerable amount of work, which could easily be avoided if the tenants would take an interest in the hygienic conditions appertaining to their homes.

During the year the Inspectors made 84,495 visits of inspection, in the course of which 14,937 nuisances were discovered—steps being brought to bear for the removal of the latter.

Throughout the abnormal thunderstorms which we experienced during the months of July and August serious damage to property was done by flooding. The sewers could not cope with the terrific downpours, and naturally drains of private property—especially in the low-lying districts—became water bound. During the rains an enormous number of complaints were made at the office—many shops and houses being flooded. However, nothing really could be done at the moment until the deluges ceased, when matters generally rectified themselves.

Whitewashing and Painting of Common Stairs and Passages.

In the beginning of June a survey was made of the whole City to ascertain the common stair cases and passages requiring to be whitewashed or oil painted. Thereafter an intimation was sent to house owners or agents pointing out the properties where this work was necessary to be executed so that the order could be placed with tradesmen, and the occupiers of house property enjoy during the summer months the benefit of clean surroundings. This, at the same time, would give tradesmen and painters the opportunity of coping with the work without congestion, so that shortage of labour could not be pleaded as a cause of undue delay. On these instructions work of this nature was gradually proceeded with, but later it was found necessary to serve 126 notices directing attention to clause 354 of "The General Police

and Improvement Consolidation Act of 1862," which is incorporated with and forms part of the Dundee Police and Improvement Consolidation Act of 1882. This acted as a stimulus, and the work was gradually overtaken by the fall of the year.

WHITE-WASH BRUSHES.—As in former years the giving out of brushes on loan to clean the dwelling houses of the section of the community who were unable to purchase those, was taken full advantage of. In fact, more so than in former years owing to the increased price of brushes—4,309 being thus given out to clean some 8,421 rooms. Where recommended by the District Inspector, whitening and ochre were also given out free to persons unable to purchase such cleaning materials.

Stables and Piggeries.

There are 442 Stables within the City, and to these 733 visits were made. They were found, generally, in quite as good a state of cleanliness as could be expected. Whatever instructions were given for whitewashing of premises were readily carried out.

The 125 Piggeries received 714 visits. In most cases the instructions given for cleansing, limewashing, removal of manure, etc., were given effect to.

Complaints were received regarding a Piggery in Broughty Ferry. This place was of bad and primitive construction through which the keeping of pigs created a nuisance—the complaint being well founded. On the matter being brought to the notice of the Owner the Piggery was reconstructed for the time being to allow of the pigs being fattened. Thereafter the use of these premises (which are surrounded by dwelling houses) is to be discontinued for such a purpose. Special attention is given to the periodical removal of manure, especially during the summer months, so that the **fly plague** may be reduced to a minimum.

Complaints.

3,444 complaints regarding nuisances, etc., were made at the Office—all of which have received attention. This number is a considerable increase over that of last year. On careful enquiry, however, 218 of these were found to be absolutely groundless, whilst quite a number were frivolous, showing little cause for action by the Department.

Statutory Intimations or Notices.

Under our Local Acts, the Public Health (Scotland) Act or other Acts which fall to be given effect to by the Department, there were 13,408 intimations or notices (written or verbal) served or given, and under Section 20 of the Public Health (Scotland) Act 8 statutory notices, as authorised by the Public Health Committee as the Local Authority, to owners or factors of properties or other authors of nuisances—all of which have received or are now in course of receiving attention.

Infectious Diseases and Disinfection.

Visits of enquiry numbered 9,982, whilst 1,758 patients were removed to King's Cross Hospital—77 of these visits were to vermin-infested houses. No contacts for infectious disease were removed to the Reception House in Fleuchar Street. Under Sections 50 and 53 of the Public Health (Scotland) Act, 6,182 notices were served upon householders directing their attention to the terms of these Sections relative to the prevention of the spread of infectious disease. 2,499 intimations were sent to the Education Authorities, school teachers, etc., preventing the attendance of school children. Houses or premises disinfected numbered 1,046, whilst 2,042 sets of clothing, bedding, etc., were disinfected, or where special authority was given by the owner, destroyed.

1,304 bales of jute for shipment to the Argentine, &c., were disinfected, and certificates to allow of exportation granted therefor.

The Municipal Dispensary was disinfected on one occasion each month.

Fuller details and statistics under this head are given in the Report of the Medical Officer of Health.

Plans Submitted to the Works Committee.

Plans of sanitary improvements on properties (for which this Department is primarily responsible) before being submitted to this Committee are examined by me.

Should occasion arise objections are lodged to the plans being passed as submitted.

Drainage and Structural Work.

The following materials have been used in the carrying out of sanitary improvements on 140 properties :—

127	Water Closets.
61	Sinks.
5	Baths.
28	Lavatory Basins.
34	Wash Tubs.
1-2	Stall Urinal.
6	Roof Ventilators.
5,597	feet Water Supply Pipe.
760	feet Flushing Pipe.
1,769	feet Soil Pipe.
1,884	feet Waste Pipe.
2,155	feet Vent Pipe.
524	feet Cast Iron Drain.
12	Cast Iron Traps.
849	yards Fireclay Drain Piping.
117	Fireclay Drain Traps.
47	Drain Inspection Chambers.
75	W.C. Apartments Erected.
7	New Washing Houses.
2	Washing Houses Reconstructed.
8	Cellars Reconstructed in Brick.

Washing Houses.

Seven new washing houses have been provided and two reconstructed, these being all fitted with white enamelled fire-clay tubs and metal wringer plates.

Gas heated type of boilers are now being largely introduced into washing houses, the gas being supplied through slot meters.

There can be no doubt these boilers tend to cleanliness in the washing house and smoke from these places (as is in evidence with coal boilers) is avoided, and at the same time labour is minimised for the workers.

Water Closets.

127 water closets, new or renewed, have been installed during the year in 74 different properties, with all necessary

soil pipes, flushing cisterns, etc. Of these, 12 are new conveniences provided in courts and on plats, staircases, and passages. 41 additional water closets have been provided at 22 properties to augment existing accommodation. 13 new water closets have been provided in dwelling houses, and in 7 houses additional water closets have been installed. 22 old type water closets, such as of the pan, hopper, etc., pattern, have been replaced by modern wash-down appliances in staircases, courts, etc., and 18 have been replaced in dwelling houses. In 5 work places 7 water closets have been introduced—4 for females and 3 for males. In sale shops 3, in garages 3, and in an office 1.

A serious grievance in connection with existing water closet accommodation (especially in the older class tenement properties) is the distance these conveniences are from the dwelling houses. Where the doors of such houses face the street and the water closets are in rear of the property, one can understand the reason such conveniences are so rarely used by the females and children and why it is so difficult to get these water closet apartments kept clean.

Where it is found practicable this difficulty is being overcome by introducing water closets behind the street doors of such houses, sufficient space is taken off the kitchen to form a water closet apartment. The interior of the apartment is metal lathed and cemented, and communication with the external air is obtained by under-ceiling part of the lobby and light provided by means of a window in the door or alongside same.

This has been successfully accomplished at a number of properties and is in course of being carried out at a number of others.

Water Closets, Earth Closets, Privies and Privy Middens.

Following upon the circular letter of instructions from the Scottish Board of Health of 1st September, 1925, which required that the Sanitary Inspector should include in his annual report "particulars as to (1) the number of common water-closets in use in the burgh, showing separately the number serving 2, 3, 4 and 5 or more tenants respectively;

and the number of (a) dry closets; (b) privy middens, and (c) ashpits, showing for each separately the number serving 2, 3, 4 and 5 or more tenants respectively." I stated it was impossible to overtake this task (or even commence thereto) last year.

A start was made with Ward 6, which was looked upon as the worst, or most suitable for the purpose under this head, and the work was finished towards the end of this year, when I reported to the Local Authority thereon as under :—

" The figures applicable to Ward VI. are now available, and the data to be supplied to the Board on the lines indicated by them are as follows :—

Number of common water-closets in use, serving—			
2 Tenants.	3 Tenants.	4 Tenants.	5 or more Tenants.
305	191	308	173

Number of (a) Dry Closets ...	...	...	...	Nil.
(b) Privy Middens ...	...	...	...	Nil.
(c) Ashpits, serving—				

2 Tenants.	3 Tenants.	4 Tenants.	5 or more Tenants.
2	2	2	116

In connection with the new survey of this Ward, I beg to submit further details which may be of interest.

The area is approximately 166.5 acres, including 30.5 acres of public parks, &c.

The resident population is 16,601, or equal to 100 persons per acre.

The total number of houses, including 12 shop houses, is 4399, as follows :—

Number of houses of 1 room ...	1054	and 9 shop houses
Do. 2 rooms ...	2138	and 3 shop houses
Do. 3 rooms ...	634	
Do. 4 rooms ...	368	
Do. 5 rooms ...	82	

Do.	6 rooms ...	39
Do.	7 rooms ...	39
Do.	8 rooms ...	12
Do.	9 rooms ...	13
Do.	10 rooms ...	5
Do.	12 rooms ...	2
Do.	13 rooms ...	1

Total ... 4387 and 12 shop houses

Number of houses per acre, not including shops or non-residential premises ...	...	...	...	26
Number of shops ...	...	...	...	518
Number of other premises (including workshops, offices, &c.) ...	...	...	...	910

WATER CLOSETS.

Number of water closets for houses ...	...	...	2,037
Number of water closets for shops, &c. ...	...	...	640
Total number of water closets ...	...	...	<u>2,677</u>

Allocation of water closets to dwelling-houses :—

			No. of Households.	
One household to one water closet ...	1,060	or	24%	
- Two households Do. ...	610	or	14%	
Three Do. Do. ...	573	or	13%	
Four Do. Do. ...	1,232	or	28%	
Five or more Do. Do. ...	924	or	21%	
Totals ...	4,399		100%	<u> </u>

DRY CLOSETS OR PRIVY MIDDENS.

There are no dry closets or privy middens in this Ward.

REFUSE DISPOSAL.

1. Ashpits.

2,407 of the houses, or 55%, are served by ashpits

Five houses have the sole use of one ashpit each.

In 116 instances, five or more tenants have the use in common of one ashpit, and this may be subdivided to show :—

28 ashpits each used in common by 5 to 10 households.				
44	Do.	Do.	11 to 20	Do.
28	Do.	Do.	21 to 30	Do.
11	Do.	Do.	31 to 40	Do.
3	Do.	Do.	41 to 50	Do.
1	Do.	Do.	78	Do.
1	Do.	Do.	84	Do.

2. Ashbins.

988 houses, or 22%, are served by 215 ashbins.

60 households have the sole use of one ashbin each.

11 ashbins serve		2 households each	
12	Do.	3	Do.
32	Do.	4	Do. and
100	Do.	5 or more Do.	

3. Daily Collections.

1,004 houses, or 23%, are served by a daily collection, bell cart, &c."

A survey of other Wards on the same lines is now in course, and as the work is completed the particulars will be laid before the Local Authority. In previous Annual Reports I have exhaustively described Dundee's condition so far as water closet accommodation is concerned, and it is not necessary to here reiterate these details.

I have also referred to the difficulties encountered by Sanitary Inspectors, other Health Officials, and Local Authorities, in the want of an official or standard or legal definition of what the words " sufficient sanitary accommodation " at individual properties constituted.

I therefore consulted with my Convener and the Medical Officer of Health, and we agreed the time had been reached when a definite pronouncement, so far as Dundee was concerned at least, should be given. It can be readily understood that owners of certain properties have a far different interpretation of these words than that held by Health Officials. Hitherto it had been a case of calling upon the owners of individual properties to provide such number of water closets or additional number of water closets as the Sanitary Inspector and Local Authority considered would *at the time* fulfil the requirements of the tenants and property being dealt with. To-day, it happens, we have to go back over properties dealt with in years gone by, with the request for further additional water closet accommodation, and naturally the owners demur—stating had such been demanded on the previous occasion the desired accommodation would have then been provided. (In this connection 41 water closets were erected at 22 different properties during 1926 to augment the existing accommodation.) Accordingly the question came before the Public Health Committee (the Local Authority under the Public Health (Scotland) Act, 1897), who recorded the following considered finding:—"The Committee unanimously agreed, subject to consideration in exceptional cases, that the Chief Sanitary Inspector should adopt as his working standard, in regard to water closet accommodation, one water closet for each separate habitation or dwelling house."

This certainly gives the Sanitary Inspector an ideal guide to work upon, and, of course, we always have the proviso for exceptional cases, such as owing to the disposition or construction of the property, want of ground, etc., when it may be found impossible in practical work to adhere to the terms of this recommendation.

I also give a detailed list showing the individual properties throughout the city served by

Privies, Earth Closets, or Privy Middens,

with the number of male and female persons using these conveniences. From this list it will be seen there are 56 properties, embracing 105 households, occupied by 217 males and 229 females. The provision of conveniences on the water carriage system at these properties is occupying the

attention of the Department. During last year 3 privies were abolished and 3 water closets provided in their stead, and 2 privies demolished after property had been closed through ground acquired by the Town Council for new housing schemes.

LIST OF PROPERTIES SERVED BY PRIVIES, EARTH CLOSETS, &C., REFERRED TO ABOVE.

District One.

Ward.	SITUATION.	NUMBER OF		TO SERVE.		
		Privies or Earth Closets.	Privy Middens	No. of Households.	Persons.	
					M.	F.
5	Easter Clepington - - - -	2	...	2	5	3
5	Dightly Toll (East) - - - -	2	...	2	5	5
5	Dightly Toll House - - - -	1	...	1	3	5
5	Old Manse Mains - - - -	1	...	1	3	4
5	Caird Park Cottages (Mains Loan) - - - -	...	2	2	5	5
5	Castle Mains (North House) - - - -	1	...	1	...	3
5	Claverhouse Dairy - - - -	...	1	1	2	3
5	Claverhouse (Cottage) - - - -	1	...	1	1	2
5	Balgray Farm-House - - - -	1	...	1	...	1
5	55 and 57 Old Glamis Road - - - -	2	...	2	6	6
5	The Manse (Lodge) - - - -	1	...	1	...	2
5	Easter Kirkton (Hamlet) - - - -	3	...	5	8	7
5	Kirkgate Mains - - - -	1	...	1	1	2
5	Trottick N.W. Cottages - - - -	2	...	6	10	11
5	" N. " - - - -	2	...	6	9	11
5	" N.E. " - - - -	2	...	5	12	14
5	" N.E. " - - - -	1	...	1	2	3
5	" S. " - - - -	2	...	6	10	11
7	Balmuir Cottage - - - -	1	...	1	3	3
7	Balmuir Smithy - - - -	1	...	1	2	...
7	Magdalene's Kirkton, Cotton - - - -	1	...	1	2	4
7	West March Farm - - - -	...	1	1	2	5
7	Balmuir, Cotton - - - -	1	...	1	2	3
7	Harestane Mill - - - -	...	1	2	2	4
7	Harestane Cottage - - - -	1	...	1	...	2
7	South Baldovan Farm - - - -	1	...	1	1	2
7	East Pitempton - - - -	1	...	1	2	2
7	Pitempton - - - -	2	...	2	1	3
7	Pitempton Cottages - - - -	2	...	2	2	5
7	517 Strathmartine Road - - - -	1	...	1	1	5
7	Station Cottage, Cox Street - - - -	1	...	1	4	2
7	458 Strathmartine Road - - - -	1	...	1	Empty	
7	West Kirkton Cottages Kirkton Road - - - -	2	...	5	9	10

District Two.

Ward.	SITUATION.	NUMBER OF		TO SERVE.		
		Privies or Earth Closets.	Privy Middens.	No. of Households.	Persons.	
					M.	F.
3	Backhill of Balgay - - -	1	..	3	6	4
3	Balfield Farm House and Bothy - -	..	1	2	9	3
3	Balfield, Cotton - - -	2	..	2	8	8
3	King's Cross Cottar Houses - -	2	..	2	3	6

District Three.

9	Blackness Nursery (Cottages) - -	2	..	2	9	4
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District Four.

1	66 East Dock Street - - -	1	..	1	2	2
1	125 Ferry Road - - -	2	..	2	2	2
1	Strips of Craigie Road, Craigie Home Farm Lodge - - -	1	..	1	Empty	
4	Bingham Terrace (Gallowhill) - -	1	..	1	3	3
10	208-210 Arbroath Road - - -	..	2	2	3	5
10	399 Arbroath Road (Craigie North Lodge)	1	..	1	4	2
10	Gotterstone Cottar Houses (North) -	..	5	5	17	11
10	do. do. do. (South) - - -	2	..	2	6	7
10	W. Balgillo Dairy (Kennedy) - - -	1	..	1	4	2
10	do. do. (Ogilvie) - - -	1	..	1	2	2
10	51 Forthill Road (Pullar) - - -	1	..	1	2	1
11	52 do. do. (McQuarrie's Houses) -	3	..	3	6	5
11	Forthill Feus (Geekie) - - -	1	..	1	2	2
11	Balgillo Road (Watt) - - -	1	..	1	2	1
11	do. do. (Keillor) - - -	1	..	1	4	4
11	do. do. (Grimmond) - - -	1	..	1	2	1
11	East Balgillo Cottar House - - -	1	..	1	3	1
11	do. do. do. do. - - -	1	..	1	2	3
11	Barnhill Farm (Grieve's House) - -	1	..	1	1	2

A perusal of the list indicates these privies, &c., to be situated on the edges of the city boundaries, and mostly brought within the area through recent extensions. Many of these habitations may be looked upon as primitive cottar houses, occupied by farm servants and country workers, &c. The difficulty in improvement here is, in some instances, want of sewerage facilities within reasonable distance or adequate water supply. Houses and conditions such as these can be tolerated in a small degree in the country—as these

are practically situated. As a matter of fact throughout the counties the privy, &c., is the ruling convenience, but little nuisance arises therefrom. Again, many of the houses may be suitable for their purpose, but are barely value for such an improvement—a costly financial item.

Ashpits and Ashbins.

The removal of ashpits and the providing in their place ash or dust bins is a subject which has been receiving the attention of the Department for some considerable time.

There is not the slightest doubt the open and dirty, undrained and insanitary ashpit, in hot weather especially, turns into a fertile breeding ground for all saprogenous larvae which eventually become disease and filth carrying insects. Ashpits of this description certainly ought to be cleared away and the more modern bin provided in their stead. The provision of these stone-built ashpits was, as a matter of fact, the first step in sanitary reform within the City some fifty years ago, and many of them, still in existence, have served their day and generation, and their abolition is embodied in the Department's memorandum of needed improvements.

On the other hand, in connection with the better class property there are in existence cistern stone-built ashpits, properly drained and provided with water and all appliances for flushing, at which one cannot much cavil—provided they are regularly emptied, kept clean and flushed. These ashpits are not broken down or dilapidated, — fit for many years' future work. This is where the difficulty of the Department comes in, because the owners naturally demur to scrap these capable conveniences and incur the new expense of providing sufficient ashbin accommodation with the incidental annual upkeep. As pointed out in my report of last year, Section 77 of "The Dundee Corporation Order Confirmation Act, 1907," which deals with the matter, adds the following proviso or rider:—

" Provided that this section shall not apply to any dustbins or *ashpits* in use at the commencement of this Order, *so long as the same are, in the opinion of the Corporation, of suitable size and construction and in proper order and condition.*"

In my opinion, ere the Local Authority can transform the whole City (every property) on to an ash or dust bin system (and do away totally with ashpits), more direct or decisive legislation will have to be in our possession.

WET CONTENT OF ASHBINS OR ASHPITS.—Much has been said in recent times under this head—so far as Dundee is concerned, perhaps too much—anent waste or soil water, slops, etc., being deposited into ash or dust bins or even ashpits.

In this connection we have to take into account that no city of its size in Britain I know of is so well equipped as Dundee with water closets. The City may be looked upon as a 100 per cent. water closet town. Thus there is no necessity for householders depositing water or wet matter into the bins or ashpits. The water closets are more convenient—in the house, or on stairs or practically at the doors.

Section 78 of “The Dundee Corporation Confirmation Act, 1907,” dealing with this subject, is as follows:—

“No sewage water or other liquid shall be put or introduced or deposited in any ashpit, dust-bin, or other receptacle for ashes and dry refuse, and the occupant of the premises to which such ashpit, dust-bin, or receptacle is attached or belongs, or any other person contravening this enactment, shall be liable to a penalty not exceeding Five Shillings.”

There is no doubt that in certain properties this nuisance does exist, and time after time attempts have been made to discover the actual offenders with a view to prosecution.

When occasion arises the Inspectors warn offenders and draw attention to the above enactment, but it can naturally be understood there is a great difficulty in tracing the actual offender.

On the other hand, at the better class tenemental properties little or no nuisance of this description arises.

However, working upon the legal powers we possess and verbal suasion, we have during the last year been instrumental in obtaining the removal of 93 unsuitable or insanitary ash-

pits and the provision of 215 ash or dust bins in their stead. Altogether throughout the year 595 new ashbins have been provided at properties where such was not in existence or to replace dilapidated bins. In this connection serious complaints are made by property owners anent the, they allege, improper handling or abuse these bins receive whilst being emptied by the scavengers. This, they state, causes a heavy annual financial upkeep as against the ashpit system.

A householder in the east end of the city was brought before the Police Court charged with depositing a quantity of wallpaper in an ashpit, in contravention of Article 8 of the Rules, Orders, and Regulations of 1898. The charge set forth that the accused had deposited trade refuse (wallpaper) in a receptacle for domestic refuse, and the Procurator Fiscal explained that trade refuse, according to law, should be removed at the expense of the occupier and under the direction of the Inspector of Cleansing in such a way as was directed by the Town Council. The Bailie administered a warning and hoped it would be taken advantage of by others.

Back Courts, Areas, Footways, &c.

13,399 square feet of pavement flags, concrete, or other impervious material were laid anew or re-laid for the upkeep of the above connected with private properties, &c. The covering of areas with concrete, &c., is much to be desired, particularly at the buildings in more congested parts of the city, where the practice of filth-throwing is most met with. When these areas, &c., are so laid it is then possible for the Cleansing Department to give beneficial attention to the proper cleansing by sweeping, and, where provided with proper stand pipes and drainage, regular flushing with water.

Tents and Vans.

These migratory dwellers and itinerant class have been back and forward throughout different parts of the city off and on during the whole year. So far as their dwellings are concerned we have little or no objection—these are usually kept scrupulously clean,

Generally we find that where they stable their vans there is no proper supply of water for culinary or domestic purposes and no suitable sanitary accommodation, or bins for the storage of rubbish, ashes, &c. Where such is not in existence we call upon the owner of the ground to do the necessary. In many cases rather than meet the incidental expense the nomadic dwellers are asked to move. In some instances where the vans are to be in residence for a considerable time water supplies and sanitary conveniences, &c., were provided.

A carnival is annually held in what is known as the "Gussie" Park for about three weeks, when some 30 to 40 caravans are located for the housing of the show people. Here the arrangements for the daily removal of the refuse, &c., are complete and the ground kept in a proper manner. Two caravans were located in Hill Street for some time, but owing to nuisances accruing they were removed. Others have been in Hill Street; Castle Green, Broughty Ferry; and the West End. In addition, we have the show people and their retinue during the Dundee Holiday Week, Flower Show Week, Spring, Autumn, and New Year Holidays, but they cause little or no nuisance.

Towards the end of each year many caravans take up their winter quarters with us.

The present system of accommodating these vans is not by any means satisfactory—the owners of caravans being charged in some cases exorbitant rents. Far better if some small field could be portioned off for this purpose where all caravans can assemble. Permanent sanitary conveniences would be erected and a sufficient supply of water for all purposes provided.

Meantime caravan owners coming to the city have to depend upon information from their own kind for vacant spaces, and often they resort to ground already prohibited for such a purpose. The result is the locus and surroundings become insanitary and occupier after occupier does not tend to improve the amenity.

Schools.

The schools within the city are under the charge of the Education Authority's own officials, who see to their structural condition and cleansing. They are all fully equipped with water closets, lavatories, drinking fountains, &c., are in a satisfactory state, and call for no special comment from me.

Factories and Workshops.

A regular system of inspection has been maintained on these places of employment, and they may be looked upon as being in an all-round satisfactory state regarding cleanliness, ventilation, provision of pure water supplies, and sanitary accommodation equal to the number of employees, &c.

On two occasions it was necessary to serve statutory notices under Section 2 (Sub-Section 3) of the Factory and Workshop Act, 1901, to compel whitewashing or painting of workshops—the requirements thereof being promptly complied with.

One notice under Section 99 of the Factory and Workshop Act, 1901, was served upon the occupier of a bakehouse to have the walls cleansed by painting in oil or varnishing, or limewashing, as the case may call for, and generally to put the whole premises in a clean and satisfactory state. (See Bakehouses.)

Seven notices under Section 29 of the Public Health (Scotland) Act, 1897 (implicating 4 workshops), were served upon the owners or occupiers thereof to provide water closet accommodation sufficient and suitable for the male or female employees therein.

In other cases the instructions of the Inspectors were carried out without delay.

H.M. Inspector of Factories co-operates with this Department, and when he, in the course of his duties, discovers any irregularities which may be remediable by the provisions of the Public Health Act or any other Acts, the exercising powers of which are conferred upon the Sanitary Inspector, he draws my attention thereto. The following were received from him ;—

Description of Irregularity.

Roof of workshop in a dangerous condition and out of repair.

Workshop and sanitary conveniences in connection therewith in a dirty condition.

Walls of bakehouse requiring limewashing and floor of bakehouse wet and dirty.

No separate sanitary accommodation provided for male and female employees.

Improvements Effected.

Roof and rhones renewed.

Workshop limewashed and sanitary conveniences cleansed.

Walls of bakehouse limewashed and defective gutter repaired, which removed the nuisance on the floor.

Two new water closets and washhand basin provided.

The carrying out of the different requirements of the Factory and Workshop Acts entailed 1225 visits by the Inspectors—other than that embraced under the head of "Bakehouses."

From the figures given in the undernoted table it will be seen that "Home Work" has practically disappeared from the city.

In former years sack sewing would be found in between 200 to 300 of the very poorest homes—generally looked upon as an income pertinent to the housewife—if we care to put it that way. Usually the conditions of the house were miserable in the extreme—filth and want—whilst the remuneration was just about in keeping with the living conditions of the worker. Machinery has, however, removed entirely that black spot from our midst, and the once familiar figure of the woman burdened with the huge bundle of sack-cloth on her back as she wended her way through the streets to and from the factory has disappeared.

The following Workshops, &c., are upon the Register at 31st December, 1926 :—

TRADE OR BUSINESS.						Workshops	Domestic Workshops	Homework	Workplaces
Basket Makers,	Feather Dressers,	and							
Bedding Manufacturers	...	...	...			1	0	0	0
Blacksmiths,	Cartwrights	and	Carriage						
Builders	...	...	...	...	...	22	0	0	1

Blacking and Chemical Manufacturers ...	2	0	0	0
Boot Repairers	78	5	0	0
Brush Makers	1	0	0	0
Cabinetmakers, Joiners, and French Polishers	78	0	0	1
Cycle and Motor Mechanics, Enamellers and Vulcanisers	29	1	0	0
Dental Mechanics	33	8	0	0
Dress, Mantle, and Corset Makers ...	60	31	0	0
Engineers	2	0	0	0
Electro - Platers, Wire Workers, Blind Makers and Bellhangers	3	0	0	0
Florists	0	0	0	10
Furriers	6	1	0	0
Glaziers	3	0	0	0
Granite and Marble Cutters, and Masons ...	0	0	0	31
Hairdressers and Wigmakers	0	0	0	90
Hosiers and Knitters	3	2	0	0
Hotels and Restaurants	0	0	0	40
Laundries	1	2	0	1
Milliners	41	1	0	0
Painters	0	0	0	52
Photographers	17	0	0	0
Piano and Gramophone Repairers ...	8	0	0	0
Picture Framers, Carvers and Gilders ...	4	0	0	0
Plasterers	0	0	0	18
Plumbers and Tinsmiths	56	1	0	0
Saddlers and Leather Cutters	15	0	0	0
Sewing Machine and Wringer Repairers ...	1	0	0	0
Slaters	0	0	0	21
Stamp Cutters, Engravers and Ticket Writers	3	0	0	0
Sugar Boilers	10	0	0	0
Tailors	68	9	5	0
Umbrella Makers and Repairers	4	0	0	0
Underclothing, Baby Linen and Blouse Makers	42	2	0	0
Upholsterers and Carpet Sewers	14	0	0	2
Waste, Rag and Metal Merchants	0	0	0	11
Watch and Jewellery Repairers and Opticians	41	3	0	0
Weighing Machine and Scale Makers ...	3	0	0	0
Miscellaneous, i.e., Gut Manufacturer, Mica Makers, Clay Pipe Makers, Paper Bag Makers, Bottlers, Potted Meat Manu- facturers, Oil Refiners, Manufacturing Chemists, Sack Repairers, &c.	47	1	0	13
Totals ...	696	67	5	291

Bakehouses.

UNDERGROUND BAKEHOUSES.

During the year 4 certificates of suitability were cancelled involving 3 factories and 1 workshop, and leaving on the Register as at 31st December, 1926, 8 Factory and 6 Workshop underground bakehouses, certified as suitable in terms of Section 101 of the Factory and Workshop Act of 1901.

FACTORY BAKEHOUSES.

At the end of the year 54 factory bakehouses were occupied and in full working order.

WORKSHOP BAKEHOUSES.

4 Workshops were closed and 3 new businesses opened up during 1926, and there remained 30 workshops at the close of the year in occupation and use as bakehouses.

EMPTY BAKEHOUSES.

Including 2 "undergrounds," 4 bakehouses are unoccupied at the end of the year. Ere these can again be used for such a purpose many improvements and structural alterations will be necessary.

The bakehouse at No. 208 Seagate referred to in my report of last year as being dilapidated and unsuitable for the purpose has been closed.

The condition in which a bakehouse in the centre of the City was kept by the occupier has been a source of annoyance to the Department for some time, being generally in a filthy, untidy and altogether unsatisfactory state. Eventually the Medical Officer of Health took the matter up with the occupier and it has now been properly cleaned up and is being kept in a state in keeping with the business.

Otherwise the bakehouses in use have been kept in a satisfactory state so far as whitewashing, oil painting, etc., are concerned—receiving 797 visits.

Common Lodging-Houses.

There are eight of these situated in the City, with accommodation as follows:—

55	Commercial Street	...	...	242	Lodgers.
2/3	Craig Street	...	...	137	"
19	Overgate	...	...	36	"
43	Overgate	...	...	39½	"
25	North Lindsay Street	...	...	56½	"
*130	Overgate	...	...	38	"
*77	Overgate	...	...	34	"
*97	Overgate	...	...	91	"

Those marked * have accommodation for both male and female lodgers.

It may be safely said they have (with one exception) been kept in accordance with the Bye-Laws thereanent, calling for no special interference, and instructions given by the Inspectors for cleansing, painting or white-washing have been attended to.

The attention of the Department was specially directed to the house at No. 19 Overgate, through one of the female lodgers importuning on the streets. She, along with her children (three boys, ages 11, 5, and 4 years) had the sole use of a room in this house, where she was in the habit of taking her "clients." To the Inspectors her actings were certainly suspicious, and the particulars were laid in the hands of the Chief Constable, whose officers verified the allegations to be correct. She was arrested, prosecuted and sent to prison, whilst the children were placed in charge of the Inspector for Cruelty to Children.

The keeper (who resided in Fifeshire) denied all knowledge of this woman's actions, whilst the deputy, who resided on the premises, also pleaded ignorance. Personally, I rather fear the latter was cognisant of the "trade" or "business" which was being carried on, although we could bring no guilt home to him. In any case, both he and the keeper were severely censured and warned that should such occur again the license for the house would be dealt with. Since then the house has been conducted in a satisfactory manner. Happily, this is a kind of contravention seldom met with in these houses. The keepers are well aware of the risk of cancellation of their licence, and the putting of the house out of bounds which they render themselves liable to. However, the Inspectors keep an argus eye on the enforcement of this part of the Bye-Laws.

The Seamen's Boarding House and The Salvation Army Home and Metropole for Women have both been kept in a capital condition and well patronised. The former has beds for 63 and the latter 180 persons.

Housing of Seasonal Outworkers.

The employers of labour of this description (for berry picking and potato lifting mainly) were specially directed as to the necessity for provision of:—Suitable sleeping quarters, the separation of adult sexes, clean bedding, a supply of water for culinary and domestic purposes, drying of wet body clothing, &c., and adequate sanitary accommodation. Effect was given to these recommendations.

On the 31st of January, 1927, under a separate print, there was issued to the members of the Town Council my Annual Report for the year 1926 on

Housing.

All the data and particulars available as at the end of the year were embodied, and it showed in detail the position.

From it I here give a few of the pertinent points as a skeleton gauge.

The following figures show the number of houses provided through the various Housing Schemes of the Corporation and by Private Enterprise throughout 1926:—

	2 Rooms.	3 Rooms.	4 and over Rooms.	Total.
By the Corporation ...	76	287	26	389
By Private Enterprise ...	2	172	181	355
Total ...				744

The figures for the previous year were:—

	2 Rooms.	3 Rooms.	4 and over Rooms.	Total.
By the Corporation ...	22	86	94	202
By Private Enterprise ...	0	13	74	87
Total ...				289

During the last thirteen years (1914 to 1926 inclusive) houses have been erected as follows :—

	2 Rooms.	3 Rooms.	4 and over Rooms.	Total.
By the Corporation ...	318	973	128	1,419
By Private Enterprise ...	3	224	452	679

giving a total of 2,098 houses.

But we have to keep in view the fact that during a like period there have been 872 houses voluntarily closed, closed by order, demolished, or converted into shops, offices, etc., as under :—

1 Room.	2 Rooms.	3 Rooms.	4 and over Rooms.
335	343	76	118

thus leaving a net increase of 1,526 separate dwelling-houses, including 300 houses provided through houses "closed" being repaired and reopened, shops, etc., being converted into dwelling-houses, or large dwelling-houses being subdivided. Under this last table it will be seen that one and two roomed houses have accounted for about 77 per cent. of the total dwelling-house disappearance.

If we scan the first table for comparison we find there are only 321 two roomed houses provided as against 678 single and double rooms put out of action.

It will also be observed that one roomed houses have gone out of the programme of the present house builders—not one being built during the period mentioned. My only comment is : I hope the building of a one roomed house may for all time be a lost art. No doubt the one roomed house was a necessity or asset in its day. But the living requirements of to-day have left that far behind—it should be looked upon as something belonging to medieval times.

In dealing with old properties every opportunity is taken advantage of to, where practicable, convert one rooms into two or three roomed abodes, and this will continue to be done as chances occur. One must also keep in mind there is still the unmet-in-full demand for two roomed houses by the working man legitimately requiring such who is unable to bear a heavier rental along with incidental taxation. It ought also to be remembered that the largest number by far of the new houses are at the present day occupied by people well able to pay the rents demanded whilst the patient cry of the *real* working man is yet unanswered to a big degree.

Then it may be asked—What about the houses that have been released or vacated through the provision of this extra new accommodation. The adjusted increase of houses per annum during the 13 years only works to some 117—not a big figure for a city the size of Dundee when we take into consideration the houses erected in the early portion of last century waiting to be wiped away. Some may tell us the population is not increasing to such a vast extent as to warrant all the additional houses. But the fact remains that individual house occupiers are increasing, and it is that which counts when we come to tally up the separate house accommodation required.

The Town Council are presently engaged upon a scheme (only yet in its infancy) for the demolition of houses unfit for human habitation—houses whose use have far too long been tolerated as places wherein to house the more unfortunate sections of the community. That scheme alone as it slowly develops will call for more houses, but they must be of the nature and cost to meet the necessity of the people who are presently living (or let me say existing) under conditions, to say the least, not a credit to the City.

The call is for new and better housing near the hub of the City's industries. A difficult problem to face and answer, I admit.

The following table as required by the Scottish Board of Health is here given in full:—

(a) Housing (Inspection of District) Regulations, 1910.

1. Number of dwelling-houses inspected	578
2. Number of dwelling-houses which, on inspection, were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	453
(Includes 258 in Small's Wynd Areas "Representation.")	
3. Number of representations made to the Local Authority with a view to the making of closing orders	21
(Includes the Small Wynd Area "Representation.")	
4. Number of dwelling-houses in respect of which closing orders were made	96
5. Number of dwelling-houses the defects in which were remedied without either the making of closing orders or the service of notices under Section 3 (1) of the Housing (Scotland) Act, 1925	65
6. Number of dwelling-houses which, after the making of closing orders, were put into a fit state for human habitation	Nil.

(b) Housing (Scotland) Act, 1925.

1. Number of dwelling-houses in respect of which notices were served under Section 3 (1) ...	96
2. Number of dwelling-houses rendered fit for human habitation under Section 3 (1) ...	2
3. Number of dwelling-houses in respect of which closing orders were deemed to have become operative under Section 3 (1) ...	18
4. Number of dwelling-houses rendered fit for human habitation by the Local Authority under Section 3 (2) ...	Nil.
5. Number of cases where intimations were given under Section 20 (1) as to insufficient water-closet accommodation :—	These provisions do not apply in Burghs.
(a) cases where requirement complied with by owner ...	
(b) cases where works carried out by Local Authority after failure of owners to do so ...	
(c) cases still pending ...	
6. Number of houses of (a) one apartment, and (b) two apartments for the erection of which the consent of the Local Authority has been given in terms of Section 111 ...	(a) Nil. (b) 2

(c) Housing, Town Planning, &c. (Scotland) Act, 1919.

1. Number of cases where notices were served under Section 40 (1) to provide dwelling-houses with water supply :—	These provisions do not apply in Burghs.
(a) cases where requirements complied with by owners ...	
(b) cases where works carried out by Local Authority after failure of owners to do so ...	
(c) cases still pending ...	

General character of the defects found to exist :—

Inadequate lighting and ventilation ; houses not provided with sinks and inside water supply ; insufficient water-closet accommodation ; want of suitable storage for foodstuffs and fuel ; insufficient ashpit or ashbin accommodation ; lack of facilities for the washing and drying of household and wearing apparel ; and open spaces around buildings restricted.

Then incidental to the shortage and insanitary housing conditions we have the evil streak which follows all too surely in the wake—

Overcrowding and Lack of Sex Separation,

—two very important items on the public health agenda of a large industrial city.

Looking back over a period of a quarter of a century as a Sanitarian, it is evident to me many things have changed. Living conditions of the people seem to have altered, and one wonders if the old standard of morality has faded from our ken. In those days fathers, mothers, or householders were ashamed to admit even overcrowding, let alone adult sex intermingling in sleep—to hint at the latter was to call the blush of shame.

It was—and still is—a section of the duty of the Officers of the Department each week in selected districts in the most densely populated parts of the City to go through during the nights—from 12 midnight till 4 a.m.—to discover overcrowding or want of sex isolation. Now during the peregrinations of one night more cases of both irregularities can be discovered than in a dozen nights of previous years. Just for instance the following are typical cases now met with :—

- (a) A single roomed house, occupied by father, three sons (ages 21, 15, and 13 years) and two daughters (ages 19 and 9 years). House overcrowded; absolutely no provision for the separation of sexes.
- (b) A single roomed house, occupied by father, mother, three daughters (ages 18, 14, and 6 years), and one son (aged 14 years). Overcrowded, and no sex separation.
- (c) A single roomed house, occupied by three females (ages 65, 40, and 28 years) and two males (ages 40 and 28 years). Overcrowded, and no sex separation.
- (d) House of two rooms, occupied by fifteen persons (twelve adults and three juveniles), two separate families. Room No. 1, Mother (aged 43 years), daughter (15), son (14), daughter (11), son (7). Room No. 2, Father (53 years), mother (43), son (21), daughter (20), daughter (17), son (14), daughter (13), son (11), daughter (9), son (15 months). Each family occupying a separate room, but no attempt at separation of sexes. Both rooms overcrowded, but second room to the extent of six adult persons. Both families are still resident under these conditions.

To the average man in the street overcrowding may mean little, other than a congregating together of an abnormal number of persons within a limited space. Bad enough that may be, yet there is a far more serious aspect from a health point of view.

In certain localities, where the single roomed house prevails to a large extent, with cubic capacity only equal to 2 or 3 persons, we find as many as 9 adults housed therein in sleep, with every crack and crevice (particularly in cold weather) stuffed with old rags or paper—ventilation practically *non est*. The outcome is, naturally, a vitiated atmosphere with a high carbon-dioxide content. To ascertain to what extent the air in these dwellings was carbon-loaded during the night six samples from sleeping apartments were taken, the results of which are as follows:—

No.	Hour taken.	No. of rooms in house.	No. of persons in house.	Volumes of CO ₂ per 10,000
				Vol. Air.
1.	1.45 a.m.	1	7 (5 adults and 2 juveniles)	14.70
2.	2.10 a.m.	1	9 (6 adults and 3 juveniles)	16.50
3.	12.15 a.m.	1	3 adults	15.90
4.	2.5 a.m.	1	7 (4 adults and 3 juveniles)	12.80
5.	12.20 a.m.	1	5 adults	6.40
6.	2.35 a.m.	2	8 (4 adults and 4 juveniles)	15.37

In the air of towns such as Dundee the proportion of CO₂ is approximately 4 volumes per 10,000, but naturally in a sleeping compartment it varies considerably over 4 volumes, depending upon the method of ventilation or where gas or oil is used for lighting, etc., purposes. In these houses oil or gas is used for illuminating purposes and in many cases for cooking as well.

The difficulty to contend with, besides that of overcrowding, is to get the inhabitants to realise the folly of restricting the air passage by closing each aperture, big and small, with all sorts of rags, etc.

Let us take sample No. 5, where the volume is only 6.40. In this case the window was pretty well devoid of glass and the blanks left unstuffed. These figures, compared with the others, surely bring home more forcibly than I can write the benefits to be derived from a free circulating current of air. It is a simple lesson the most uninitiated can understand.

In leaving this sordid section of a Department's sphere of operations, I repeat what I have written on previous occasions that until the house supply is equal to the demands

and at rents the purse can cope with overcrowding and sex mixing in sleep will just continue.

Education as to the far-reaching effects of these grave conditions and of householders to make the most of possibilities are the sole assets which the Sanitarian has to work upon.

Corporation Huts.

During last summer complaints reached the Department relative to the huts in Dens Road being infested with bugs, and an inspection revealed the complaint to be well founded. The extermination of these pests presented a rather vexing problem owing to the fact that the huts were built solely of timber and lined with asbestos plates.

By co-operating with the City Factor's Department arrangements were made to have the wall beadings, face plates of doors, skirtings, &c., removed, after which the houses were treated with sulphume gas, followed by painting all crevices, spaces, &c., with paraffin. The work was then finished by filling in all wall and ceiling spaces with plaster of paris instead of replacing the beading—the whole surfaces being then re-painted. Since then no complaints have been received.

Houses Let in Lodgings.

With the exception mentioned below, these houses—always excluding overcrowding and want of sex separation mentioned under "Housing"—have been kept and conducted quite favourably, and in the main call for no adverse criticism.

Considerable difficulty was experienced with a house at No. 51 Overgate through the irregularities of the keeper, and also to the structurally dilapidated and defective state of the building. Undernoted is a copy letter which was sent to the keeper on the subject :—

"House Let in Lodgings—No. 51 Overgate.

"I beg to inform you that on the 16th inst. I received a complaint from a party who was resident in the above house for the night or two previous about the room which was allocated to him and his family being in a filthy condition and overrun with lice

and bugs. This is not by any means the first time your house has been found vermin infested and filthy. In May of this year three persons lodging in your house had to be taken to King's Cross Hospital for the purpose of being cleansed of vermin.

" On the 17th inst. I had this house thoroughly inspected and find there is just cause for the complaint.

" Taking the premises as a whole, they are internally in a very filthy and vermin infested state. The floors are disgusting; the lobbies in the same condition; and accumulations of filth, old bedding, flock, broken plaster, &c., in the store and under attic stair, also in the refuse container; water closet choked, glass of windows broken, plaster work broken, &c.

" Further, the bedding of practically all the beds is in a dirty and vermin infested condition.

" The odour generally throughout the house is most offensive. Altogether the house as kept by you is totally unfit for human habitation and cannot be tolerated as a place for receiving and housing lodgers.

" The separation of the sexes as required by the Bye-Laws is not efficiently enforced.

" I send you herewith enclosed a copy of the Bye-Laws regarding ' Houses Let in Lodgings,' and beg to direct your attention specially thereto.

" Further, I now inform you that unless the whole of this house is thoroughly cleansed internally, the bed-clothing cleansed and freed from vermin and overhauled where necessary, and the Bye-Law regarding sex separation rigidly adhered to—all to comply with the aforesaid Regulations within SEVEN DAYS from and including MONDAY FIRST, the 23rd inst., steps will be taken to have the premises as a House Let in Lodgings placed out of bounds as such.

" Meantime I have placed a copy of this letter into the hands of the Clerk to the Local Authority of Dundee."

Before the War this house came under the nomenclature of a Common Lodging-House and was registered as such. During the War the Keepers of these Common Lodging-Houses had perforce to increase the charge per night, which put the houses outwith the Bye-Laws thereanent.

In 1925 the Local Authority made provision to meet this contingency in the Local Provisional Order, raising the amount to be charged per night from 6d. to 1s.

On this Order coming into force the keeper of this house (a woman) refused to fall into line and have her premises re-registered as a Common Lodging-House. For this con-

tumacious attitude she personally had a very good reason financially. The rent of her house was only 10s. 6d. per week, inclusive of rates, whilst she was making a weekly income of approximately from £6 6s. to £7 per week—a monetary accomplishment she could not have achieved under the Common Lodging-House Bye-Laws. As a matter of fact, the house was run more or less on the lines of a “farmed-out house”—i.e., furnishing the rooms and letting them out, and the furniture was not by any means of an elaborate or valuable description.

Although a considerable improvement was effected upon the condition of the house internally in cleanliness, yet structurally the premises in their entirety were in a very dilapidated and totally unsuited condition for its purpose, and arrangements were made for a Closing Order under the Housing Acts being placed upon them. At the time of writing the Order is going through the necessary legal course.

The Rent and Mortgage Interest Restriction Acts, 1920 and 1923.

Applications made under the 1920 and 1923 Acts ...	11
Granted	8
Refused	3

The 8 certificates granted were all applied for towards the end of the year, and referred to houses that had been represented to the Local Authority as unfit for human habitation. The other 3 applications were refused owing to the repairs required being of a minor nature and after the factors had placed the orders in the hands of their tradesmen.

Dairies, Cow-Sheds and Milk-Shops.

At the end of the year the Register stood as follows:—

Dairymen or Cow-Keepers	56
Retail Purveyors of Milk	844

made up as under:—

Purveyors from shops	715
Producers (dairymen or cow-keepers)	56
Purveyors from vans	37
Purveyors resident outwith the City but registered to Purvey milk within it from vans on streets	26
Purveyors from shops or milkhouses together with vans on streets	10

The New Bye-Laws made by the Town Council under the Milk and Dairies (Scotland) Act, 1914, on the 5th August, 1926, were confirmed by the Scottish Board of Health on the 3rd November following and came into force on that date.

By the end of the year the whole of the persons engaged in the milk trade were registered or re-registered under the above Act of 1914.

In August the dairy herd at Ellengowan, Arbroath Road, was dispersed and the byres cleared away to make room for a Housing Scheme. The buildings were in a dilapidated state and had well served their day and generation. Automatic drinking troughs for the cows were installed in the byres at No. 63 Kinghorne Road.

Owing to the dilapidated and total unsuitability of the premises at No. 127 Liff Road, Lochee, the application for registration under the Act was refused.

In the 56 Byres or Cow-Sheds there are housed 872 cows and to these premises 737 visits of inspection were made. These byres or cow-sheds, and buildings in connection therewith, pretty well conformed to the conditions and requirements of the Bye-Laws just cancelled, have been kept clean and limewashed twice a year or oftener if desired by the Inspectors. It has not yet been found possible to overtake the survey work of each of the premises individually to ascertain to what extent they comply with the new Bye-Laws to enable me to embody the information in the report of this year. This duty will be taken up at the earliest available opportunity. One or two of the buildings will doubtless have to be strenuously dealt with, and alterations or improvements wrought on others to bring them into keeping with the new enactments. For some time a practice has been creeping in of bedding the cows with sawdust at several of the cow-sheds. Although previously we had a Bye-Law dealing with the material not to be used for bedding purposes yet sawdust was not specially mentioned. Opportunity was taken to embody sawdust (amongst other prohibited materials) in the new Bye-Laws which will give us more direct control. Steps are being taken to have the practice discontinued. It has always been one of the out-

standing instructions of the Inspectors that cleanliness of the clothing and person of those engaged in the handling of the milk must be rigidly adhered to, as well as the daily grooming of the cows and the washing of the udders and teats before commencing milking operations. In addition we have now authority to insist that milkers, etc., shall wear clean overalls and caps during the process of milking.

There are 11 cow-sheds or premises where milk cows are kept to the number of 29 **exempted** under Section 2 of the 1914 Act "from which a person sells milk only in small quantities and for their own consumption to persons in his employment or to neighbours."

The usual number of cows kept range from 1 to 4, and the premises may be looked upon as answering the purpose.

There are 715 Milk Shops and to them 3728 visits were made. They have been kept in good order and clean, and little or no complaint can be raised against them.

They too will be gone over in due course in relation to the New Bye-Laws.

So far as able to ascertain from systematic inspection the requirements of Articles 5 to 16 of the Milk and Dairies (Scotland) Order, 1925, are generally being complied with.

The Milk (Special Designations) Order (Scotland) 1923.

The number of licenses held for the production and sale by retail of Pasteurised Milk has considerably increased until there now are :—

2 Producers and
156 Retailers

a total of 158 as against 57 last year.

This milk seems to be taking on in a highly satisfactorily manner all over the City and there is evidence that a still increased number of retailers will stock it.

The clean handling of milk through being sold in bottles with sealed stoppers or caps is without doubt appealing to the Citizens, and there is undoubtedly a large increase of the sale of milk under this method.

Milk or other Foods for Bacteriological Examination.

Samples were purchased or taken by the Food Inspectors for bacteriological examination, as follows :—

Sweet Milk	...	...	...	...	55
„	(Pasteurised)	...	...	...	14
„	(Grade A, T.T.)	...	...	...	2
„	(Certified)	...	...	...	2
Cheese	...	...	...	...	1
					—
					74

These were submitted to Prof. W. J. Tulloch at the University College, the duly appointed Bacteriologist

The result of the examinations will be found fully dealt with by the Medical Officer of Health in his Report for the year.

Food Inspection.

FOODSTUFFS ARRIVING AT THE PORT OF DUNDEE, EITHER DIRECTLY FROM ABROAD OR BY COASTWISE TRAFFIC.

The following two tables show the kind and quantity of foods arriving by waterway at the Port during the year.

The total of 41,089 tons 14 cwts., as against 39,919 tons 4 cwts. last year and 35,368 tons 12 cwts. during 1924.

TABLE No. I.

Shows the foodstuffs arriving coastwise at the Port by steamers plying between Dundee and the Ports of London, Hull, Liverpool, Aberdeen, Newcastle, Belfast, Southampton, Leith, &c., during 1926 :—

				Tons.	Cwts.	Qrs.
Bacon and Ham	...	...	...	17	5	2
Butter	...	...	...	156	5	1
Cereals	...	...	...	151	12	3
Cheese	...	...	...	447	7	0
Chemical Food	...	...	...	0	9	1
Cocoa and Cocoa Beans	...	...	...	116	15	3
Cocoa Butter	...	...	...	13	15	3
Cocoonuts, Cocoonut Stearine and Dessicated Cocoonut	...	...	...	36	10	3
Coffee	...	...	...	32	12	3
Confectionery	...	...	...	226	5	0
Corn Four	...	...	...	1	8	3
Cream of Tartar	...	...	...	8	9	1

Eggs	19	19	2
Eggs (Dried and Liquid)	4	10	1
Fish (Dried)	28	13	0
Fish (Tinned)	174	1	0
Flour	4,731	13	0
Fruit	537	15	0
Fruit (Dried)	421	5	3
Fruit (Pulp)	258	17	1
Fruit (Tinned)	421	0	0
Glucose	630	1	0
Lard and Lard Compound	437	10	1
Macaroni	3	3	1
Margarine	564	10	1
Meat (Tinned and Fresh)	329	19	3
Milk (Dried)	6	9	3
Milk (Tinned)	100	12	2
Nuts	39	14	1
Peas, Beans, &c.	102	16	0
Pickles, Spices, Condiments and Sauces	59	2	0
Preserves	138	3	0
Rice	186	10	2
Sago	0	2	2
Sugar	651	13	0
Syrup	608	11	1
Tapioca	194	2	0
Treacle	313	9	3
Vegetables	535	10	2
Vegetables (Tinned)	5	10	2
Vinegar	49	17	2
	12,764	2	0

TABLE No. II.

Shows the amount and kind of foods arriving direct from abroad, for the year ending 31st December, 1926.

	Tons.	Cwts.	Qrs.
Bacon and Ham	4	4	1
Butter	56	11	1
Cereals	132	11	0
Cheese	67	17	0
Cocoa and Cocoa Beans	4	12	0
Cocoa Butter	12	3	2
Cocoanuts	45	2	2
Confectionery	2	3	0
Eggs	43	2	0
Flour	12,249	3	0
Fruit	95	0	1
Fruit (Dried)	1	11	1
Fruit (Pulp)	54	3	2
Fruit (Tinned)	8	13	3

Glucose	...	...	...	...	610	0	0
Lard	...	...	...	...	6	10	0
Meat (Tinned)	...	...	...	...	94	2	3
Milk (Dried)	...	...	...	...	27	2	2
Milk (Tinned)	...	...	...	...	234	12	0
Peas, Beans, &c.	...	...	...	...	173	17	2
Rice	...	...	...	...	102	3	3
Sugar	...	...	...	...	13,734	19	3
Treacle	...	...	...	...	203	5	2
Vegetables	...	...	...	...	362	0	0
					28,325	12	0
Total for Home Ports (Table I.)	...	...	...	...	12,764	2	0
Total	...	...	...	...	41,089	14	0

Food Inspection (Shops, Stalls, Barrows, &c.).

There is nothing out of the ordinary run to mention under this head. The premises where food is manufactured, prepared, stored, or exposed for sale (as mentioned in the Circular of the Scottish Board of Health) have been subjected to a regular system of inspection and may be looked upon as in a satisfactory state and conform to any enactments thereanent.

In 49 instances it was found necessary to take possession of foodstuffs as being in a condition unfit for human consumption. In the appendix to this report will be found a detailed statement as to the kinds and weights of stuffs thus seized.

In all cases these foods were destroyed with the consent of the owners, agents, or shopkeepers.

It will also be observed that tinned foodstuffs again form a bulky section of the articles seized. The harm is usually caused by the tins receiving damage, or having become "blown" by air reaching the contents — decomposition setting in.

Further, it will be noticed that not a single pound of fresh beef, veal, mutton, or pork is mentioned amongst the unsound foods. This immunity is largely due to our Clearing House system, and gives us a very favourable comparison against any other large city in the country.

The barrows on the streets and stalls in the markets (held in Shore Terrace three days per week) where fruit, beef, etc., are sold in large quantities, were also supervised.

Again on no occasion have fish for sale in shops or from off barrows or stalls on the streets been found in an unwholesome condition.

In carrying through work of this nature the Food Inspectors made 9498 visits.

Public Health (Meat) Regulations (Scotland), 1924.

Five certificates of approval for storage accommodation were granted by the Local Authority to persons who sell or offer or expose for sale any meat or meat food product from any cart or other vehicle, or from any basket, barrow, booth, or stance.

Public Slaughter-Houses and Dead Meat Market.

The Public Slaughter-Houses are the only premises within the City available for this purpose—all animals intended for human food must be slaughtered and dressed at these establishments.

These abattoirs and the Dead Meat Market are under the charge of a Superintendent, who is a qualified Meat Inspector, and the Veterinary Inspector collaborates with him in the work. There are also two Detention Officers under the Public Health (Meat) Regulations (Scotland), 1924.

The meat undergoes a rigid examination before being allowed out for sale by retail in the shops, stalls, etc.

The meat of all animals killed elsewhere and sent dressed into the City has first of all to undergo our Clearing House system of inspection by the Meat Inspectors. With such a method there is little or no possibility of unsound butcher meat reaching the table of the consumer.

Fish Inspection at the Fish Market, Carolina Port.

The work here gives little cause for official intervention. The market is visited usually once a week by our Food Inspectors (oftener if called in by the Superintendent) who examine the fish offered for sale, and in addition make an inspection of the premises, boxes, etc., as to cleanliness.

The fish landed during 1926 were as follows :—

Fresh Fish	...	...	...	6,799,744 lbs.
Cured Fish	...	...	...	693,392 lbs.
				7,493,136 lbs.

against a total of 8,459,921 lbs. last year and 7,622,892 lbs. in 1924.

60 lbs. of prawns were found unfit for human food and, with the owners consent, were destroyed.

Butter and Margarine Acts.

At the beginning of the year there were 33 persons registered as wholesale dealers in margarine or margarine cheese under Section 7 (4) of the Food and Drugs Act, 1899. One new license was granted and one cancelled, leaving 33 still on the register.

Three premises are registered for re-working butter under Section 1 (1) (a) of the Butter and Margarine Act, 1907.

All the premises have been inspected and are suitable for the purposes of the trade, being in a clean and satisfactory state, 445 visits for this purpose being made.

Seven samples of re-worked fresh butter were taken and submitted to the Public Analyst, who reports them to be genuine.

Food and Drugs Acts.

Undernoted I give a statement of the number of samples purchased under these Acts during the last twenty-four years :—

			Certified to be	
		Purchased.	Genuine.	Adulterated.
1903	...	144	130	14
1904	...	200	170	30
1905	...	199	170	29
1906	...	201	169	32
1907	...	215	184	31
1908	...	257	234	23
1909	...	304	274	30
1910	...	455	414	41
1911	...	445	415	30
1912	...	435	411	24
1913	...	484	449	35

1914	...	607	566	41
1915	...	615	588	27
1916	...	619	590	29
1917	...	610	578	32
1918	...	629	598	31
1919	...	607	582	25
1920	...	602	578	24
1921	...	663	629	34
1922	...	671	650	21
1923	...	669	634	35
1924	...	684	659	25
1925	...	693	661	32
1926	...	666	645	21

The following is a synopsis of the samples purchased this year :—

I.—Samples taken in the ordinary course, with a view of following up by prosecution, if necessary, should adulteration be discovered.

				Certified to be	
				Purchased.	Adulterated.
Sweet Milk	...	...	176	172	4
Do. (Pasteurised)	...	...	17	17	0
Do. (Sterilised)	...	...	7	7	0
Do. (Grade A, T.T.)	...	...	2	2	0
Do. (Certified)	...	...	2	1	1
Hand Skimmed Milk	...	...	1	0	1
Tapioca	...	...	3	3	0
Margarine	...	...	27	27	0
Coffee	...	...	19	18	1
Whole Rice	...	...	15	13	2
Ground Cinnamon	...	...	14	12	2
Lard	...	...	5	5	0
Sago	...	...	5	5	0
Black Pepper	...	...	4	4	0
White Pepper	...	...	18	18	0
Barley	...	...	5	5	0
Cream of Tartar	...	...	17	16	1
Ground Ginger	...	...	7	7	0
Baking Soda	...	...	1	1	0
Salted Butter	...	...	1	1	0
Ground Rice	...	...	5	5	0
Whisky	...	...	1	0	1
Total	...	...	352	339	13

II.—The following samples were taken in terms of Section 2 of the Butter and Margarine Act, 1907 :—

	Taken.	Genuine.	Adulterated.
Sweet or Fresh Butter	7	7	0

III.—The undernoted “ test ” samples were purchased by deputy :—

				Certified to be		
				Purchased.	Genuine.	Adulterated.
Sweet Milk	...	...	...	3	2	1
Do.	(Pasteurised)	...	...	23	23	0
Tapioca	...	...	...	5	5	0
Margarine	...	...	...	22	22	0
Coffee	...	...	...	10	10	0
Whole Rice	...	...	...	12	10	2
Ground Cinnamon	...	...	...	10	9	1
Lard	...	...	...	4	4	0
Sago	...	...	...	5	5	0
Black Pepper	...	...	...	1	1	0
White Pepper	...	...	...	17	17	0
Barley	...	...	...	11	11	0
Cream of Tartar	...	...	...	19	17	2
Ground Ginger	...	...	...	13	13	0
Baking Soda	...	...	...	7	7	0
Salted Butter	...	...	...	1	1	0
Ground Rice	...	...	...	10	10	0
Whisky	...	...	...	1	0	1
Custard and Custard Powder	...	...	...	3	3	0
Egg Powder	...	...	...	1	1	0
Vinegar	...	...	...	2	2	0
Flour	...	...	...	12	12	0
Oatmeal	...	...	...	9	9	0
Baking Powder	...	...	...	1	1	0
Spice	...	...	...	2	2	0
Sweet or Fresh Butter	...	...	...	1	1	0
White Pepper Condiment	...	...	...	1	1	0
Mustard	...	...	...	1	1	0
Malt Vinegar	...	...	...	1	1	0
Jam	...	...	...	8	8	0
Chicken, Ham and Meat Paste	...	...	...	1	1	0
Peas (Tinned)	...	...	...	2	2	0
Lobster Paste	...	...	...	1	1	0
Treacle	...	...	...	2	2	0
Barley Meal	...	...	...	2	2	0
Dripping	...	...	...	1	1	0
Sausages	...	...	...	8	8	0
Olive Oil	...	...	...	13	13	0
Castor Oil	...	...	...	12	12	0
Cod Liver Oil	...	...	...	2	2	0
Camphor and Eucalyptus Oil	...	...	...	1	1	0
Camphorated Oil	...	...	...	7	7	0
Syrup of Figs	...	...	...	3	3	0
Camphor	...	...	...	1	1	0
Eucalyptus and other Oils	...	...	...	1	1	0
Olive Oil and Glycerine	...	...	...	1	1	0
Epsom Salts	...	...	...	7	7	0
Eucalyptus Oil	...	...	...	4	4	0
Linseed Oil	...	...	...	3	2	1

Glycerine	3	3	0
Spirits of Turpentine ...	1	1	0
Emulsion of Cod Liver Oil ...	1	1	0
Spirits of Nitre	2	2	0
Sal Volatile	2	2	0
Red Wine	2	2	0
Fruit Wine	2	2	0
Full Cream Condensed Milk	3	3	0
Machine Skimmed Con- densed Milk	2	2	0
Unsweetened Evaporated Milk	1	1	0
Total ...	307	299	8
Add Table I. ...	352	339	13
Add Table II. ...	7	7	0
Total ...	666	645	21

With a population of 170,060 this works out to 3.91 samples for every 1000 persons, as against 4.09 in 1925.

The lowest milk fat recorded this year was 1.92 (as against 2.37 per cent. last year), and the highest 5.10 (as against 6.60 per cent. last year), whilst the average milk fat was 3.61 (as against 3.42 per cent. in 1925). The number of samples with milk fat below 3 per cent. was 5, and the number with milk fat of 4 per cent. and over, 25.

The average milk fat of the **official samples** taken each month was as follows:—

	No. of Samples Purchased.	Average Fat.
January	16	3.49
February	16	3.32
March	16	3.48
April	15	3.56
May	16	3.77
June	17	3.65
July	15	3.59
August	16	3.68
September	24	3.72
October	16	3.81
November	16	3.68
December	21	3.60
	204	3.69

Of the 230 samples of sweet milk, 224 were certified to be genuine—6 only being adulterated as against 23 last year.

It was deemed essential to institute legal proceedings in one case—the offender being fined 30s. The sellers of the other adulterated samples were warned.

One sample of hand-skimmed milk was purchased, which the Public Analyst reported to be adulterated with 7.13 per cent. added water. The vendor was prosecuted and fined 40s.

From an experience extending over many years and a scrutiny of the Departmental figures, it is found milk is the main field of exploitation of the food adulterator—far more than in any other description of food.

To bear this out I have gone over the years 1909, 1910, 1911, 1912, and 1913—the five years before the war—when out of 2,123 samples purchased 147 were of milk adulterated and only 13 of other foods. Then during the last five years 1922, 1923, 1924, 1925, and 1926—there were 3,383 samples purchased, out of which the Analyst reported 100 milks to be adulterated and 34 of other food stuffs.

The year 1926 produced the smallest number of adulterated samples of milk in the history of the Department's operations—7 only being returned thus, out of which only 2 prosecutions were resorted to.

It is satisfactory to observe that this nefarious practice is gradually becoming extinct—the strict enforcement of the Food and Drugs Acts proving to those sharks upon the community that there is not even a corner for them in business—he has either to get out or take seriously to heart the warnings given by the Department.

The supervision and ultimate prosecutions against occupiers of restaurants, tea rooms, and eating houses recorded in the last two Reports have, I think, proved effective, as no complaint in reference to the diners being supplied with skimmed milk and margarine instead of sweet milk and butter have reached me.

The adulterations in the other class of foods are usually of a minor nature, and in many cases the seller can be

completely exonerated—proving completely the foods were sold as received from the manufacturer or wholesale houses.

3 samples of cinnamon were mixed with sand or silicious matter by a small percentage,

1 sample of coffee mixed with chicory,

3 samples of cream of tartar were mixed with baking soda,

1 sample of linseed oil was boiled linseed oil,

and the sellers of these were all warned.

Talc facing in whole rice has been met with more in past years. The standard of such facing is .50, and the Analyst returns talc facing of from .05 to .22 over the arbitrary standard. The sellers and wholesale agents were warned.

7 samples purchased as sago turned out to be genuine tapioca. These are not recorded amongst "adulterations," but the sellers were warned to be more careful.

A complaint reached the Department anent the standard strength of whisky being sold in a public-house in Broughty Ferry. As a preliminary the Food Inspectors purchased a sample under "Test" conditions, which the Analyst reported to be 50.6 degrees under proof. An official sample was then purchased, which was certified to be 49.6 degrees under proof. The original strength standard of whisky as per Section 6 of the Sale of Food and Drugs Act Amendment Act of 1879 was 25 degrees under proof. This, however, was cancelled by Section 10 of the Licensing Act of 1921, which placed the standard at 35 degrees under proof. Here we have adulteration to the extent of practically 100 per cent. over the pre-war standard and 43 per cent. or thereby over the present legalised strength.

Notwithstanding the fact that a card in block type was displayed in the shop conveying the following information—"Dundee Wine, Spirit, and Beer Protection Association. All spirits sold here *unless otherwise asked for* are reduced to 50 degrees under proof. Price, 1/10 per gill," it was deemed expedient to institute legal proceedings, not, however, with the absolute certainty of securing a conviction, but more to test the matter and bring the extent of adulteration before the public.

After an extensive trial the Sheriff found the accused not guilty.

From this it may be accepted that the law, so far as the selling of intoxicating liquors is concerned, is absolutely in chaos; these considered notices which are exhibited seem to have driven the proverbial "carriage and pair" through the existing laws of the present day.

Preservatives in Food.

The first section of the new Regulations relative to the above come into operation on 1st January, 1927, and I understand arrangements have already been made by shop keepers or tradesmen for the due compliance therewith.

Advertisements have been inserted in the Public Press calling attention to the stipulations of the various Regulations.

Interments.

UNDER SECTION 69 OF THE PUBLIC HEALTH (SCOTLAND) ACT, 1897.

For the interment of bodies of destitute persons, whose friends, if any, were alleged to be unable to defray burial expenses, 55 applications were made; 54 of these were granted, and in the remaining case arrangements were otherwise made.

The total cost to the Local Authority was £99 16s., but refunds were made by relatives or through the medium of insurance companies of £18 12s., which sum has been handed over to the City Collector to be credited towards the estimate under this head.

Of the interments carried through, 17 were adults and 37 juveniles.

Burial Grounds.

No material change has taken place on these as when referred to in my Report of last year. They have been well and satisfactorily kept.

The following interments were made in each :—

Eastern Necropolis	1,455
Western Necropolis	1,001
Western Cemetery (Perth Road)	165
Barnhill Cemetery	170
Parish Church Burying-Ground (Broughty Ferry)	18
Old Mains Cemetery... ..	4
New Mains Cemetery	25
St. Andrew's Churchyard	1

Total 2,839

Smoke Nuisance.

Throughout the year 24 observations—of one hour's duration (except in the case of steam wagons on streets)—were made of the smoke issuing from the stalks of factories, etc., as follows:—

Chimneys of Jute Mills and Factories.	Chimneys belonging to the Corporation.	Chimneys, of other Works.	Steam driven Wagons on Streets.
14	4	3	3

Out of which the following warning letters were sent to the offenders:—

6	3	1	3
---	---	---	---

Through the agencies of:—

- (1) Renewal of boiler power and steam generated plant;
- (2) Addition of boiler power to existing steam plant;
- (3) Scrapping of steam plant and the substitution of Electric driven machinery in its stead;
- (4) Provision of smoke consumers or other smoke abatement appliances;
- (5) Use of superior class of coal;
- (6) Employment of experienced firemen, etc., etc.;

the atmospheric pollution from this source has during this year, at least, been considerably reduced and the air contamination of former years has not been so conspicuous.

Shops Acts.

A large portion of the work incidental to the putting into force of the above Acts, such as street patrolling to see that the Closing Hours as fixed by the Acts and Closing Orders made thereunder are adhered to, has to be performed by the appointed Inspectors after the usual Department working hours. During the year 4389 visits were made to shops. The contraventions (192) met with have mostly been of serving customers after closing hours; out of these 14 prosecutions had to be resorted to, when fines of from 5/- to 20/- were imposed. Prosecutions are not instituted unless previous warnings are ignored.

The provisions as to meal hours, employment of young persons and children, half-holidays and exhibition of necessary notices, etc., were seen to, as well as the seats for female shop assistants as required by Section 3 of the principle Act.

The work of supervising

Places for Public Refreshment.

of which there are 255 is also placed upon this Department. These have been regularly inspected to assure they are internally in structural accordance with the Bye-Laws etc.

Theatres and Cinemas.

Periodical inspections numbering 145 were made to the above buildings throughout the year to see that the Regulations (so far as coming under the jurisdiction of the Department) were being complied with. Such items as ventilation, provision of sufficient water closet and lavatory accommodation, both for the patrons and performers, general cleanliness of the building, &c., receiving particular attention.

Any small improvement that was considered necessary was promptly carried out on notification being given to the occupiers, but they have given little or no cause for official interference.

Rag Flock Act.

During the year six samples of rag flock were taken in the premises of bedding factories, &c., and submitted to the Public Analyst, who reported all the samples to be within the standard of 30 parts of chlorine per 100,000 parts of flock.

The figures as reported by the Analyst on the samples submitted are as follows:—

One sample yielded ...	...	...	11.60 parts.
Two samples yielded...	...	...	10.00 parts.
One sample yielded ...	...	...	13.00 parts.
One sample yielded ...	...	...	18.30 parts.
One sample yielded ...	...	...	20.00 parts.

Rats and Mice (Destruction) Act.

Only one " Rat Week " was held throughout the year, but the campaign against the vermin has been waged in a more or less degree continuously, owners and occupiers of property all being advised to take measures for extermination, whilst farmers within the city boundaries were instructed to take action, and especially during threshing operations,

Several complaints of the existence of the rodents were recorded—all receiving attention with satisfactory results. In some cases a considerable amount of expense in work of a structural nature had to be incurred—in one property resulting in 47 rats being accounted for. Grocer and fruiterer's shops or premises where food is stored are the oases of these pests' operations. The only way here is efficient rat proofing.

Keeping the vermin perpetually on the move, wiping out breeding grounds and the young, every owner to have his individual property, ground or cover impregnable, and keeping food outwith their reach, would bring these undesirables into a much smaller population.

The Rat Week was held from 29th March till 3rd April, when lantern slides depicting the destructive habits of the vermin were shown at 15 cinemas; 1000 handbills were served at shops, restaurants, bakehouses, stables, piggeries, dairies, &c., where rats were likely to harbour; 300 posters displayed within the city and harbour; whilst advertisements were inserted in the newspapers. Farmers were notified and accounted for 435 head. The extermination was taken up by the Harbour Authorities; masters of vessels were served with bills of instructions; 135 head were accounted for at the port.

So far as was able to be ascertained, some 2,000 rats were put out of action during that week, including 336 in public sewers, 100 at the Cleansing Department, manure dumps, &c.

Offensive Trades.

No alterations fall to be recorded under this head.

The registered premises are situated as follows:—

62 East Dock Street—Tallow melter.

Marine Parade—Tanner.

1 Park Street—Tanner.

At Public Slaughter-Houses, East Dock Street—Gut Cleaner.

At Public Slaughter-Houses, East Dock Street — Hide Factors (2).

At Public Slaughter-Houses, East Dock Street—Slaughterer of Cattle (Corporation).

At Public Slaughter-Houses, East Dock Street — Tripe Cleaner.

and to them 15 visits were made. The businesses have been conducted in a manner quite compatible with the nature of the trade, and no action of an adverse nature was found necessary.

Port Inspection.

During the year 1926 the total number of ships arriving at the Port of Dundee was 1,028, a decrease on the figure for 1925. Of these, 358 came from foreign ports, and 722 visits were paid to them. The number of vessels arriving direct from foreign ports was 203, whilst 155 called at ports in this country before reaching Dundee. In 53 cases vessels came from infected ports, 8 direct and 45 indirect.

The cargoes consisted of timber and flax from the Baltic Ports, food-stuffs and pitch from America, food-stuffs, fancy goods and steel plates from the Continent, and jute, gunnies, linseed, hemp, cotton seed and tea from India. There were two consignments of Canadian cattle, one of 628 and one of 581, a total of 1209 head.

During the inspection of vessels arriving from foreign ports, 188 nuisances and defects were brought under the notice of the Officers in charge of the ships, all of which were remedied here.

Rat Notices to the number of 102 were issued to the Officers in charge of ships. Tar and canvas or rat guards were placed on the moorings of all vessels coming from infected ports. The fumigation of ships was found to be of frequent occurrence, and the use of traps was urged in any case where rats were reported.

During the year three cases of sickness were reported. Of these, 2 were removed to the Royal Infirmary and 1 treated on board. One case of illness (which had occurred during the voyage, and left in hospital abroad) was reported, Dundee being the first port of call in this country.

Total Number of Verbal Intimations	...	...	...	276
Total Number of Special Rat Notices Issued	...	...	...	102
Total Number of Visits to Ships	...	...	...	722
Total Number of Ships from Infected or Suspected Ports	...	...	...	53
Total Number of Ships from Infected or Suspected Ports (direct)	...	...	...	8
Total Number of Ships from Infected or Suspected Ports (indirect)	...	...	...	45
Total Number of Nuisances or Defects attended to	...	...	...	188

Viz. :—Forecastles Cleaned Out	...	...	...	...	6
Mess-rooms Cleaned Out	...	...	...	...	14
Galleys and Store-rooms Cleaned Out	...	...	...	...	45
Accumulations of Food Refuse	...	...	...	...	8
Dirty W.C.'s	...	...	...	...	69
Choked or Defective W.C.'s	...	...	...	...	13
Discharge of Foul Water on Quay	...	...	...	...	29
Dirty and Defective Baths	...	...	...	...	4

In addition the following work was carried out while the vessels were in Port :—

Fresh Water Tanks Cleaned Out	...	...	...	...	16
Forecastles Washed or Repainted	...	...	...	...	20
Bathrooms or Wash-places Painted	...	...	...	...	19
W.C.'s Painted	...	...	...	...	25
Galleys Washed or Painted	...	...	...	...	15

Section 164 of the Burgh Police (Scotland) Act, 1892.

PROVISION AND RENEWAL OF RAIN WATER SPOUTS AND DOWNPIPES.

Under the above Section the following work was executed, viz. :—

Number of Properties where the rain water spouts and conductors have been overhauled, renewed or otherwise repaired.	Lineal feet of new rain water conducting channel rhones or gutter pipes used in the renewing or repairing of the same.	Lineal feet of new rain water conducting or downfall pipes used in the same way at the different properties.
873	17,660	6,052

General Prosecutions.

The prosecutions for the year were as under :—

Contravention of Food and Drugs Acts.	Contravention of Shops Acts.	Total.
3	14	17

Detailed particulars of each are given under the various heads.

I am, Gentlemen,

Your obedient Servant,

ROBERT MITCHELL,

Chief Sanitary Inspector.

APPENDIX.

Statement by Sanitary Inspector of Proceedings under the
Public Health and other Acts during 1926.

I.—Nuisances.

Subordinate Sanitary Inspectors employed	...	..	20
Complaints received	...	...	3,444
Intimations served under Sec. 19	...	...	13,408
Notices served under Sec. 20	...	...	8
Cases in which legal proceedings were taken	...	...	0
Do. do. do. successful	...	...	0

II.—Workshops.

Inspections	...	...	2,022
Notices served under Sec. 2 (3) of Factory and Work- shop Act, 1901	...	...	2
Cases in which legal proceedings were taken	...	...	0
Do. do. do. successful	...	...	0

III.—Tents and Vans.

Inspections	...	...	267
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IV.—Underground Dwellings.

Reported to Local Authority	...	...	0
Notices to Owners (Sec. 74)	...	...	0
Cases in which legal proceedings were taken	...	...	0
Do. do. do. successful	...	...	0

V.—Common Lodging-Houses.

On Register at 31st December, 1926	...	...	8
Common Lodging-Houses belonging to the Local Authority	...	...	0
Inspections between 8 a.m. and 10 p.m.	...	...	351
Inspections between 10 p.m. and 8 a.m.	...	...	8
Intimations of Irregularities sent to Keepers	...	...	0
Cases of Infectious Disease reported to Medical Officer (Sec. 97)	...	...	2
Unregistered Premises dealt with	...	...	0
Cases in which legal proceedings were taken (breaches of bye-laws, &c.)	...	...	0
Cases in which legal proceedings were successful	...	...	0

VI.—Houses Let in Lodgings.

On Register at 31st December, 1926	...	...	96
Inspections	...	...	553
Cases in which legal proceedings were taken	...	...	0
Do. do. do. successful	...	...	0

VII.—Infectious Diseases.

Visits of Inquiry, &c.	9,982
*Patients removed to Hospital	1,758
*Persons removed to House of Reception	0
Notices served under Sec. 50 (2)	6,182
Notices served under Sec. 53 (2)	
Intimations to Education Authorities, Teachers, &c. ...	2,499
Houses or Premises disinfected	1,046
Sets of Clothing, Bedding, &c., disinfected or destroyed (29,430 articles)	2,042
Cases in which legal proceedings were taken	0
Do. do. do. successful	0

* Only those removals in which the Sanitary Inspector has personally, or by his assistants, taken part should be inserted.

VIII.—Burials.

Burials undertaken in terms of Sec. 69	54
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IX.—Slaughter-Houses and Offensive Trades.

Applications under Sec. 32 for sanction to establish ...	0
Applications granted	0
Applications under Sec. 33 for Licence or Renewal of Licence	0
Applications granted	0
Public Slaughter-Houses (if any) belonging to Local Authority	1
Private Slaughter-Houses	0
Unlicensed Slaughter-Houses dealt with	0
Inspections of Slaughter-Houses	17
Inspections of other Offensive Businesses	15
†Number of such other Offensive Businesses at 31st December, 1926	7
Cases in which legal proceedings were taken (breaches of bye-laws, &c.)	0
Cases in which legal proceedings were successful	0

X.—Unsound Food.* (See table appended.)

Inspections under Sec. 43—(a) Meat	3,312
(b) Other Foods	6,631
Seizures of Unsound Food—(a) Meat	0
(b) Other Foods	49
Animals or carcasses or articles of food destroyed with owner's consent by or at the instance of the Sanitary Inspector	49
Cases in which owners of Unsound Food were prosecuted	0
Convictions in connection with above cases	0

XI.—Analysis of Samples.†

	Sale of Food and Drugs Acts. Number.	Condensed Milk Regulations. Number.	Dried Milk Regulations. Number.
Samples procured for Analysis	660	6	0
Certified to be genuine ...	639	6	0
Certified to be adulterated ...	21	0	0
Cases in which legal proceed- ings were taken ...	3	0	0
Cases in which legal proceed- ings were successful ...	2	0	0

XII.—Rag Flock Act, 1911.†

Samples procured for analysis	...	...	...	...	6
Certified to conform to Board's standard	...	...	...	...	6
Certified not to conform to Board's standard	...	...	...	...	0
Cases in which legal proceedings were taken	...	...	...	...	0
Do. do. do. successful	...	...	...	...	0

XIII.—Bye-Laws.

Inspections in carrying out bye-laws relating to—

(a) Pigstyes	...	...	...	...	...	714
(b) Public Conveyances	...	...	...	Under charge of Police.	...	...
(c) Buildings	...	...	...	...	...	1,094
(d) Cleansing in Special Scavenging Districts	...	...	...	...	...	0
(e) Other sanitary matters	...	...	...	...	...	90,589

‡ State nature of such offensive businesses and number of each.

* Only those inspections and seizures in which the Sanitary Inspector has personally taken part should be inserted. He is also requested to give on the fly-leaf a statement of the nature and quantities (or weights) of the food seized. **Inspections made by him at Slaughter-Houses, &c., as Meat Inspector or Detention Officer under the Public Health (Meat) Regulations (Scotland), 1924, should NOT be included.**

† Only those samples which have been procured by the Sanitary Inspector personally, or by his deputies, should be inserted here, and the Sanitary Inspector is requested to give a statement of the articles analysed:—Milk, butter, pepper, &c.

*ARTICLES OF FOOD SEIZED.

ARTICLES.	WHERE SEIZED.	QUANTITIES OR WEIGHTS.				REASONS FOR SEIZURE.
		Tons.	Cwts.	Qrs.	Lbs	
Fruit (fresh)	Shops, or stalls, or barrows on streets, or food stores, or fish market.	1	1	1	7	Decomposition.
Fruit (tinned)		0	6	3	23	
Fish (tinned)		0	0	3	27	
Soup (tinned)		0	0	0	1	
Meat (tinned)		0	8	1	16	
Milk (tinned)		0	1	1	27	
Vegetables... ..		0	15	3	8	
Maize Flour		0	12	2	0	
And		3	7	1	25	
Eggs		15				
Rabbits	51 pairs					
Pigeons	11½ brace					

‡ NUMBER OF OTHER OFFENSIVE BUSINESSES.

Tallow Melters	∴	...	...	...	...	...	1
Tanners	...	...	...	...	...	...	2
Gut Cleaners	...	...	...	...	...	...	1
Tripe Cleaners	...	...	...	...	...	...	1
Hide Factors	...	...	...	...	...	...	2
Total							7

† SALE OF FOOD AND DRUGS ACTS.

ARTICLES ANALYSED.

Sweet Milk (including Pasteurised and Sterilised, &c.)	230
Milk, Hand Skimmed	1
Tapioca	8
Margarine	49
Coffee	29
Rice (Whole)	27
Rice (Ground)	15
Ground Cinnamon	24
Lard	9
Sago	10
Pepper (Black)	5
Pepper (White)	35
Barley	16
Cream of Tartar	36
Ground Ginger	20
Baking Soda	8

Salted Butter	2
Sweet Butter	8
Whisky	2
Custard and Custard Powder	3
Egg Powder	1
Vinegar	2
Flour	12
Oatmeal	9
Baking Powder	1
Spice	2
White Pepper Condiment	1
Mustard	1
Malt Vinegar	1
Jam	8
Chicken, Ham and Meat Paste	1
Peas (tinned)	2
Lobster Paste	1
Treacle	2
Barley Meal	2
Dripping	1
Sausages	8
Olive Oil	13
Castor Oil	12
Cod Liver Oil	2
Camphor and Eucalyptus Oil	1
Camphorated Oil	7
Syrup of Figs	3
Camphor	1
Eucalyptus and other Oils	1
Olive Oil and Glycerine	1
Epsom Salts	7
Eucalyptus Oil	4
Linseed Oil	3
Glycerine	3
Spirits of Turpentine	1
Emulsion of Cod Liver Oil	1
Spirits of Nitre	2
Sal Volatile	2
Red Wine	2
Fruit Wine	2
Full Cream Condensed Milk	3
Machine Skimmed Condensed Milk	2
Unsweetened Evaporated Milk	1
Total	666